

GABRIELLA KULCSÁR

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**THE BEGINNINGS  
OF THE BRONZE AGE  
IN THE CARPATHIAN BASIN**

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VARIA  
ARCHAEOLOGICA  
HUNGARICA







**Gabriella Kulcsár**

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The Makó–Kosihy–Čaka and  
the Somogyvár–Vinkovci cultures in Hungary



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THE SOMOGYVÁR–VINKOVCI CULTURES IN HUNGARY



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## FOREWORD

In contrast to most prehistorians working in Central, Eastern and South-East Europe,<sup>1</sup> Hungarian scholars generally link the onset of the Early Bronze Age to the cultural changes and the appearance of new cultures following the disintegration of the Baden–Pécel culture, the huge Late Copper Age complex of the Carpathian Basin.<sup>2</sup> The middle third of the 3rd millennium BC saw the emergence of cultures which both preserved certain traits of the late Vučedol traditions and transformed then by blending them with elements drawn from other sources. The first among these new cultures was the Makó–Kosihe–Čaka complex, followed by the Somogyvár–Vinkovci culture.

The archaeological record indicates that the onset of the Bronze Age, corresponding to the late Vučedol and the post-Vučedol period,<sup>3</sup> was a time of constant change, in part shaped by the spread of metallurgy and metalworking. In addition to similar metal artefacts such as shaft-hole axes and chisels, certain pottery vessels such as interior decorated footed bowls, encountered in a roughly similar form in several contemporary cultures, are also imprints of an extensive cultural network spanning large regions.

The Eneolithic of Central Europe and the Early Bronze Age of Hungary currently represent one of the most intensively investigated periods of prehistory, especially regarding the comparison of chronological systems. Owing to its central location, the Carpathian Basin plays a key role in the region's prehistory. The publication of the growing corpus of archaeological finds, including earlier assemblages, is not merely an important task, but also a prerequisite to the better understanding of the cultural trajectories and interactions shaping the Bronze Age of the Carpathian Basin.

The first overviews of the Somogyvár–Vinkovci and the Makó–Kosihe–Čaka cultures were based on stray finds because there were few stratified assemblages from professional excavations.<sup>4</sup> There has been a welcome increase in the material of this period during the past forty years. The greatest contribution, however, comes from the large-scale salvage excavations conducted over the past decade, bringing both a qualitative and quantitative growth in the corpus of finds. The assessment of these excavations will be one of the major tasks of Bronze Age studies over the next years.

The current work seeks to examine the Early Bronze Age 1–2 period in Hungary through the re-publication of several old find assemblages and various new, hitherto unpublished finds, combined with a re-assessment of the already published material. I was able to personally examine the finds in the museums of southern Transdanubia, in Counties Somogy, Tolna and Vas, and in County Csongrád in the region east of the Danube. The finds from County Somogy provide the backbone of the data collection in Transdanubia. During his investigation of the medieval Benedictine abbey on Somogyvár–Kupavárhegy, Kornél Bakay also uncovered the remains of a late Vučedol and Somogyvár–Vinkovci settlement on the eponymous site of the Somogyvár–Vinkovci culture. The

<sup>1</sup> For problems of terminology, cp. *Burger* (1988) 210; *Govedarica* (1989a) Abb. 29; *Panajotov* (1989); *Bertemes* (1992) 86; *Parzinger* (1993) Abb. 16; *Panajotov* (1995); 23; *Lichardus–Vladár* (1996) 29; *Gogâltan* (1998); *Maran* (1998); *Gogâltan* (1999b); *Nikolova* (1999); *Bertemes–Heyd* (2002).

<sup>2</sup> For the terminology of the Early Bronze Age in Hungary, cp. *Bóna* (1961); *Kalicz* (1962); *idem* (1968); *Bóna* (1975a); *idem* (1975b); *Kalicz–Schreiber* (1976a) Abb. 1; *Ecsedy* (1979a) 118, Abb. 7–9; *Kalicz* (1982) Abb. 1; *Kalicz–Schreiber* (1982) Abb. 1; *Ecsedy* (1985) 93; *Raczky* (1988); *Kalicz–Schreiber* (1991) Figs 8–10; *Bóna* (1992a) 16; *Ecsedy* (1994a) 17–18; *Raczky* (1995); *Kalicz–Schreiber–Kalicz* (1997) Abb. 1–2; *idem* (1999); *Bondár* (2001) Figs 1–2; *Dani* (2001); *Tóth* (2003); *Dani* (2005c). The terminology of Bronze Age studies in Romania has taken a similar approach: *Roman* (1985); *idem* (1986) Fig. 7; *Roman–Németi* (1989); *Ciugudean* (1996); *Gogâltan* (1996); *idem* (1998); *idem* (1999b).

<sup>3</sup> *Ecsedy* (1979a) 118; cp. *Maran* (1998) 315, Taf. 82.

<sup>4</sup> *Bóna* (1965a); *Dimitrijević* (1966) and *Kalicz* (1962); *idem* (1968); *Vladár* (1966).



prehistoric occupation levels and pits were strongly disturbed during the construction of the medieval abbey, this being the main reason for the few stratified assemblages from this site. However, the finds are important even in themselves for they come from the northernmost settlement of the late Vučedol culture. The number of Early Bronze Age sites in County Somogy rose from eight to sixty following the examination of various museum collections and the material collected during earlier field surveys. This number grew to ninety-six following more recent salvage excavations. While the increase of the known sites represents little more than a quantitative growth, it does demonstrate the potentials of research in this field.

The backbone of the study is the gazetteer of the sites and finds of the Makó-Kosihy-Čaka and the Somogyvár-Vinkovci cultures. An overview of the two cultures' distribution is followed by a discussion of their settlements and settlement patterns, next comes the detailed typological analysis of the artefactual material. The conclusions drawn from this analysis will hopefully provide a sound basis for future investigations and, ultimately, a reliable starting point for the comparison of the chronological and typological frameworks used in Central and South-East Europe. The examination of the finds from a fresh perspective and the analysis of a combination of several classes of material called for the re-interpretation of cultures and groups which had hitherto been believed to represent uniform cultural complexes. The archaeological and palaeoenvironmental studies of the past ten years will no doubt modify our views on the period's social structure in several respects.

The idea for this book came from Prof. Dr. István Bóna. I am indebted to him for his invaluable and insightful comments.

The indispensable research facilities were provided by the Archaeological Institute of the Hungarian Academy of Sciences from 1996, for which I would like to thank Csanád Bálint, Mária Bondár and László Kovács, as well as my colleagues at the Institute.

While researching the material for this book, I had the opportunity to study in various universities and institutions abroad by way of research grants. In 1999, I was able to study in the Department of Prehistory and Early History of Vienna University and to personally examine material in the collection of the Naturhistorisches Museum in Vienna through a research grant. In 2000, a DAAD and a DAAD-MÖB grant enabled studies in the Department of Prehistory and Early History of Heidelberg University. Special thanks are due to Prof. Dr. Joseph Maran, my research consultant in Heidelberg, and to Prof. Dr. Eszter Bánffy for providing this opportunity.

I received encouragement and help during my work from many colleagues, who read through and commented on draught versions and stimulated my research by sharing their ideas. Thanks are due to all of them, and especially to Mária Bondár, Szilvia Honti, Nándor Kalicz, Erzsébet Ruttkay, Ildikó Szathmári, István Torma and Gábor Kalla, as well as to the younger generation of prehistorians studying the Bronze Age: János Dani, Klára P. Fischl, Viktória Kiss, Gábor V. Szabó, Florin Gogâltan and Vajk Szeverényi.

I am also indebted to my colleagues, who generously allowed me to study and publish the many finds from their excavations. I would like to extend my thanks to Szilvia Honti (Kaposvár), Mária Bondár, Nándor Kalicz, István Torma, Viktória Kiss, Gyöngyi Kovács, Gábor V. Szabó (Budapest), Kornél Bakay (Kőszeg), Attila Gaál, János Gábor Ódor, Márta G. Vizi and Antal Csiszér (Szekszárd), Péter Gergely Németh (Kaposvár), Gábor Ilon (Szombathely), János Dani (Debrecen), Katalin B. Nagy (Hódmezővásárhely), Ágnes Somogyvári (Kecskemét), Marietta Csányi and Judit Tárnoki (Szolnok), János József Szabó (Szentés), Livia Bende and Gábor Lőrinczy (Szeged), Klára P. Fischl (Miskolc), Zsolt Gallina, Krisztina Somogyi.

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many comments on the style, Magdaléna Seleanu did more than simply translate text; Erzsébet Jerem and Rita Kovács made many small corrections. My thanks to all of them.

This study is an enlarged and updated version of my doctoral thesis, written in 2001 and successfully defended in 2003. I have made every effort to take into account the material and the new findings published since then. It is my hope that despite the traditional typo-chronological approach pursued in the examination of the evidence, the findings and tentative conclusions presented here will contribute to new studies on the cultural diversity of the 3rd millennium BC. While new advances in this field of research can, obviously, only be achieved through a combination with archaeometric analyses, the present study will hopefully be a useful starting point for future research.

\* \* \*

A debt of gratitude is due to my family, my husband and children for their patience, encouragement and unfailing support while I worked on the manuscript. This book is dedicated to them.





# THE MAKÓ–KOSIHY–ČAKA CULTURE

## Introduction

The label Makó–Kosihy–Čaka culture denotes the sites and distribution of a larger cultural complex. The burial found at Makó–Vöröskereszt (cat. no. 171)<sup>5</sup> in the Maros Valley in southern Hungary, the settlement and the burials uncovered at Čaka/Cseke (315–316) in southern Slovakia, and the settlement investigated on the outskirts of Malé Kosihy/Ipolykiskeszi (343) in the Ipeľ/Ipoly Valley represent the diagnostic type assemblages of the complex distributed over an extensive area (Fig. 1).

Regional adaptation strategies notwithstanding, the Makó–Kosihy–Čaka culture preserved the major traits that had originally warranted its separation as an independent cultural entity. The ceramic types described as the culture's hallmarks ("Leitform") by Nándor Kalicz in 1968 appear in all of the culture's assemblages. The culture's perhaps most distinctive vessel type is the interior decorated footed bowl, whose decoration and distribution across virtually the entire Carpathian Basin has been the subject of extensive research. Its origins have been sought in the Zók–Vučedol and Vučedol–Laibach culture of Slavonia, the Srem and southern Transdanubia, and practically all bowls of this type, as well as the associated finds, have been assigned to this culture.<sup>6</sup>

In 1955, Boguslaw Novotný grouped the finds of this type from Slovakia and Moravia under the label "Slavonian culture" owing to their strong resemblance to the interior decorated bowls from that region.<sup>7</sup> Later, the other wares in assemblages of this type were described as Nagyrév pottery.<sup>8</sup> Jozef Vladár challenged this interpretation and by introducing a new designation, the Kosihy–Čaka group, he argued for the group's independence.<sup>9</sup>

At roughly the same, Kalicz re-classified the finds from Hungary by distinguishing three sub-groups in the Zók culture.<sup>10</sup> In his system, the Makó group, the Nyírség group and the Vučedol group, whose assemblages contained interior decorated bowls of the Vučedol–Laibach type, were assigned to one and the same cultural complex of the Carpathian Basin. Kalicz believed that in addition to the fundamental southern elements, groups arriving from the eastern European steppe too played a major role in the formation of the Makó culture.

The assessment of the Makó–Kosihy–Čaka culture has repeatedly changed over the forty years since the publication of the seminal studies by Kalicz and Vladár.<sup>11</sup> There has also been a welcome rise in the number of known Makó–Kosihy–Čaka sites and assemblages during the past fifteen years in both Hungary<sup>12</sup> and Slovakia,<sup>13</sup> as well as in other regions.<sup>14</sup>

Evidence for the culture's distribution has been unearthed from south-eastern Moravia to the Érmellék region in north-western Romania, and from southern Slovakia to the Bačka/Bácska and the

<sup>5</sup> For a more detailed description of the sites and the relevant literature, cp. the catalogue of sites (pp. 179).

<sup>6</sup> Tompa (1937) 60–61; Patay (1938) 22–25; Banner (1939); Patay (1940).

<sup>7</sup> Novotný (1955).

<sup>8</sup> Točík (1961a) 21–24; Vladár (1962).

<sup>9</sup> Vladár (1966).

<sup>10</sup> Kalicz (1962); *idem* (1968) 77–109.

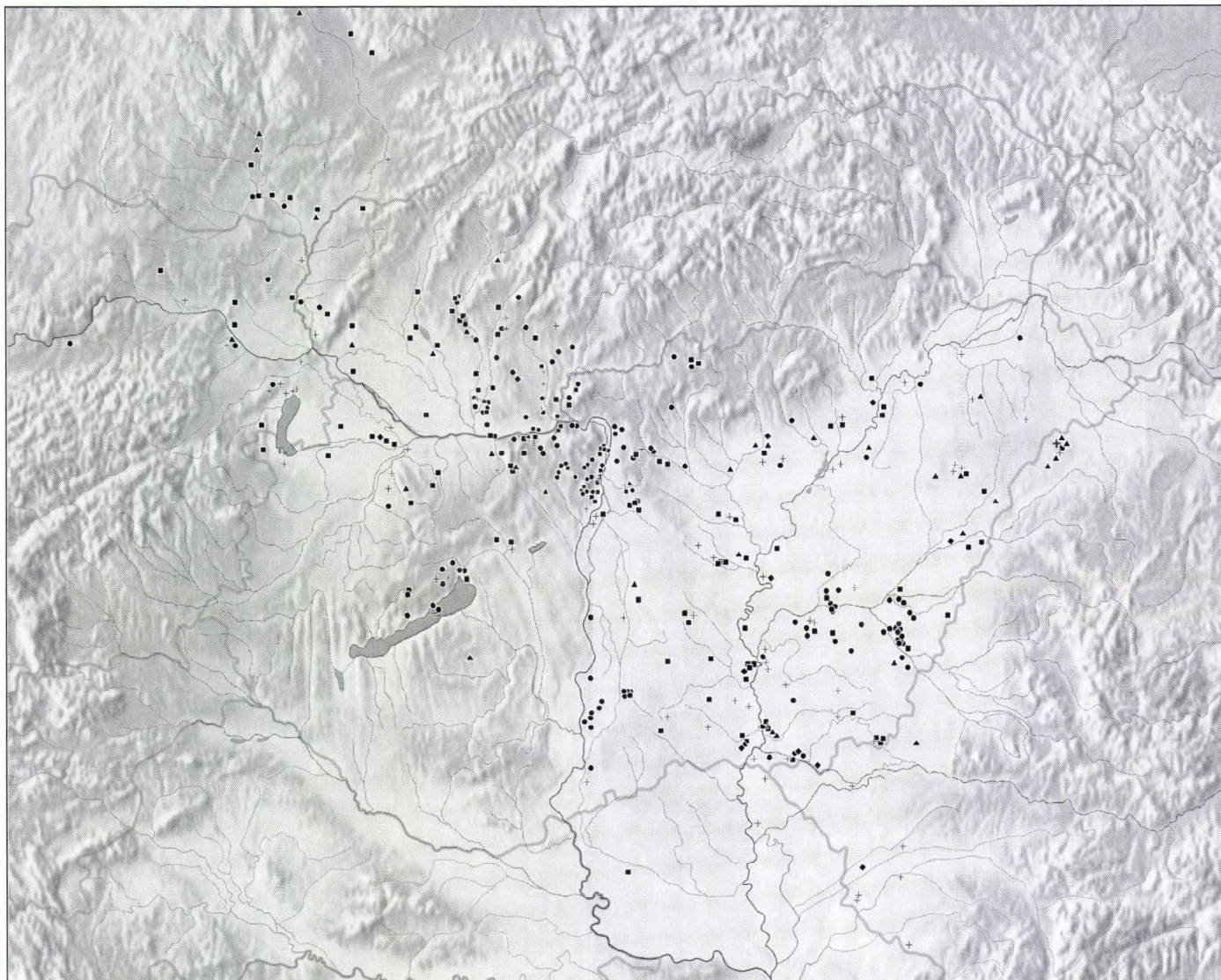
<sup>11</sup> For good overviews, cp. *Ecsedy* (1979a); Kalicz (1981); *idem* (1984a); Vladár (1989); Bóna (1992a); Ruttkay (1995b); Kalicz-Schreiber-Kalicz (1997).

<sup>12</sup> Szathmári (1999b); Kulcsár (2002a); Tóth (2003); Dani (2005c).

<sup>13</sup> Nevizánsky (2001).

<sup>14</sup> Ruttkay (1995a); Gogáltan (1999b); Koledin (2007); Woidich (2008).





*Fig. 1. Sites of the Makó-Kosihy-Čaka culture*  
 + stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

Banat/Bánát region in northern Serbia and western Romania. While sharing many similar features, the differing cultural and ecological conditions within the culture's vast distribution led to the emergence of several regional variants. In spite of the re-assessment of the material from earlier excavations and the preliminary publication of the finds and findings of more recent salvage excavations, the corpus of finds is still insufficient for addressing more general issues of smaller/larger units and cultural complex/culture/group. Even so, a detailed overview provides an excellent opportunity for reviewing the current state of research and the re-examination of typological schemes, as well as for a fresh look at the cultural trajectories of the Late Copper Age and the Early Bronze Age in South-East and Central Europe. This study offers a broad look at previous research on the Makó–Kosihy–Čaka culture and its regional groups, a systematic review of the culture's regional groups and their sites, as well as a typological analysis of the finds and a discussion of the culture's relative chronology based on the currently available evidence.

The Makó–Kosihy–Čaka period corresponds to the onset of the Early Bronze Age in Hungary, the close of the Eneolithic in Slovakia, Bohemia, Moravia and Serbia, the close of the Late Neolithic in Austria, and the Late Copper Age/Early Bronze Age transition in Romania. The end of the Makó–Kosihy–Čaka sequence (end of the Early Bronze Age 2 in Hungary) can be correlated with the RB A0 period. In terms of absolute chronology, the Makó–Kosihy–Čaka sequence falls between 2800/2700 and 2500/2300 BC.<sup>15</sup>

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<sup>15</sup> Battonya–Georgievics-tanya (3870±40 BP): *Bondár–D. Matuz–Szabó* (1998) 19, note 7; Domony (2339–2136 BC): *Forenbaher* (1993) 241; Szeghalom–Környe (2566–2542, 2502–2448, 2434–2346 BC): *Raczky et al.* (1992) 43; Üllő–Site 5 (2470–2340, 2300–2100 BC): *Kővári–Patay* (2005) 124–125; cp. Sárrétudvari–Órhalom: *Dani–M. Nepper* (2006) 48; and *Maran* (1998) Taf. 82; *Gogáltan* (1999b); *Nikolova* (1999).



## The distribution of the Makó–Kosihy–Čaka culture

The core of the Makó–Kosihy–Čaka distribution lay in the heartland of the Carpathian Basin, in present-day Hungary and south-western Slovakia (*Fig. 1*). The label “Makó group of the Zók culture”,<sup>16</sup> initially used to describe the cultural context of the finds assigned to this culture, was gradually replaced by the currently used Makó–Kosihy–Čaka culture or Makó culture for the Hungarian, Romanian and Serbian distribution. Slovakian scholars prefer to use the term Kosihy–Čaka group<sup>17</sup> or culture, to which the name Makó is sometimes added, and this terminology has also been adopted by their Moravian colleagues. Austrian prehistorians tend to use the term Kosihy–Čaka/Makó or Kosihy–Čaka group.

The distribution of the Makó–Kosihy–Čaka culture and the assemblages related to this cultural complex will be discussed according to the following main regions (partly corresponding to natural geographic regions and partly to modern administrative areas; *Figs 2–6*):

- Region I: The eastern and southern distribution (*Fig. 3*)  
(eastern and south-eastern Hungary: Counties Bács-Kiskun, Békés, Csongrád, Hajdú-Bihar, Szabolcs-Szatmár-Bereg; western and south-western Romania; Serbia);
- Region II: The northern areas of the Great Hungarian Plain and northern Hungary (*Fig. 4*)  
(Counties Borsod-Abaúj-Zemplén, Heves, Jász-Nagykun-Szolnok and Nógrád);
- Region III: Central Hungary and the Budapest area (*Fig. 4*)  
(Budapest and County Pest);
- Region IV: Transdanubia (*Fig. 5*)  
(Counties Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Tolna, Vas, Veszprém);
- Region V: Slovakia (*Fig. 6*);
- Region VI: Austria (*Fig. 6*);
- Region VII: Moravia (Czech Republic) (*Fig. 6*).

### ***Region I. The eastern and southern distribution***

(eastern and south-eastern Hungary: Counties Bács-Kiskun, Békés, Csongrád, Hajdú-Bihar, Szabolcs-Szatmár-Bereg; western and south-western Romania; Serbia; *Figs 2–3*)

In the lack of excavations, the eastern boundary of the Makó–Kosihy–Čaka distribution was first determined from the scatter of stray finds. The corpus of finds known in 1968 indicated that the culture's settlement territory extended to the right bank of the Tisza and the river's stretch between Tiszafüred and the Maros–Körös Interfluvium to its south on the left bank, the southernmost site being marked by Čoka.<sup>18</sup> This was also confirmed by research in north-western Romania, where the earliest phase of the Bronze Age was represented by the sites of the Nyírség culture.<sup>19</sup> The various assemblages recently published from north-western Romania indicate that the currently known easternmost Makó–Kosihy–Čaka sites lie in the Érmellék region.<sup>20</sup>

<sup>16</sup> Kalicz (1968).

<sup>17</sup> Vladár (1966).

<sup>18</sup> Kalicz (1967) *Fig. 1*; *idem* (1968) *Abb. 3*.

<sup>19</sup> Bader (1978) 20; *idem* (1982).

<sup>20</sup> Early Bronze Age I: Némethi–Roman (1995) 30; Némethi (1996); Kacsó (1997); Némethi–Dani (2001) 115. Earlier: Roman (1981); *idem* (1986) 31.



Regions of the Makó–Kosihy–Čaka culture	Stray finds	Settlement (field survey and stray finds)	Settlement (excavation)	Settlement and burial	Burial	Total
<b>Region I</b>	<b>38</b>	<b>54</b>	<b>37</b>	<b>6</b>	<b>16</b>	<b>151</b>
Bács-Kiskun	5	14	6	–	1	26
Békés	6	33	12	–	1	52
Csongrád	8	4	11	4	3	30
Hajdú-Bihar	4	1	6	1	5	17
Szabolcs-Szatmár-Bereg	5	2	–	–	1	8
Romania	8	–	1	1	5	15
Serbia	2	–	1	–	–	3
<b>Region II</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>31</b>
Borsod-Abaúj-Zemplén	1	–	3	1	1	6
Heves	3	3	1	1	2	10
Jász-Nagykun-Szolnok	4	2	2	1	1	10
Nógrád	–	3	2	–	–	5
<b>Region III</b>	<b>9</b>	<b>28</b>	<b>28</b>	<b>4</b>	<b>2</b>	<b>71</b>
Budapest	2	–	8	3	1	14
Pest	7	28	20	1	1	57
<b>Region IV</b>	<b>18</b>	<b>27</b>	<b>18</b>	<b>1</b>	<b>6</b>	<b>70</b>
Fejér	1	–	2	–	1	4
Győr-Moson-Sopron	5	–	8	1	1	15
Komárom-Esztergom	7	16	6	–	3	32
Somogy	–	–	–	–	1	1
Vas	1	–	–	–	–	1
Veszprém	4	11	2	–	–	17
<b>Region V</b> Slovakia	<b>10</b>	<b>28</b>	<b>28</b>	<b>2</b>	<b>5</b>	<b>73</b>
<b>Region VI</b> Austria	<b>9</b>	<b>4</b>	<b>6</b>	<b>–</b>	<b>1</b>	<b>20</b>
<b>Region VII</b> Moravia (Czech Republic)	<b>2</b>	<b>2</b>	<b>7</b>	<b>–</b>	<b>1</b>	<b>12</b>
<b>Total</b>	<b>94</b>	<b>151</b>	<b>132</b>	<b>16</b>	<b>35</b>	<b>428</b>

Fig. 2. Regional distribution of the Makó–Kosihy–Čaka sites

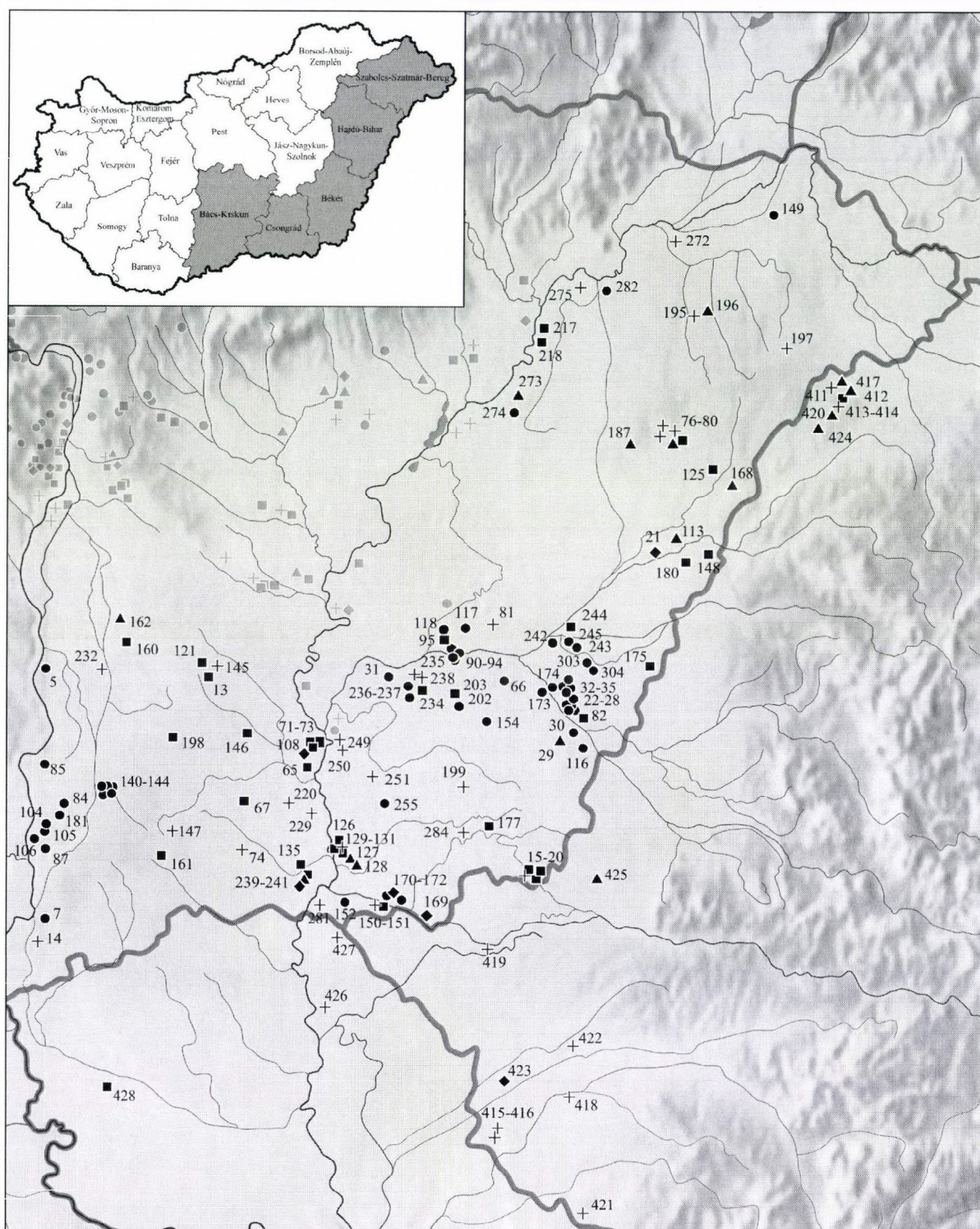
Rózsa Kalicz-Schreiber argued for a Makó–Kosihy–Čaka presence across the greater part of the Carpathian Basin (including southern Transdanubia) during the Early Bronze Age 1 and she too drew the culture's eastern boundary according to Kalicz's findings as presented in his 1968 monograph.<sup>21</sup> In his discussion of the Somogyvár–Vinkovci settlements in Transdanubia, István Ecsedy divided the Makó and Nyírség sequence into two main phases within the post-Vučedol 1–2 period. He too based the distribution of these cultures on the finds published by Kalicz.<sup>22</sup>

The finds from a few Makó–Kosihy–Čaka pits at Tiszalúc–Sarkad excavated by Pál Patay in the late 1970s and the site's location led to a re-assessment of the label "Zók culture". Kalicz assigned the cultures previously regarded as part of the same cultural unit to three chronological horizons: the Vučedol culture, followed by the Makó and Somogyvár–Vinkovci cultures, and lastly the Nyírség

<sup>21</sup> Kalicz-Schreiber (1975a) Abb. 1; *idem* (1976a) Abb. 1.

<sup>22</sup> Ecsedy (1979a) Abb. 8–9.





*Fig. 3. Distribution of the Makó-Kosihy-Čaka culture*  
Region I: The eastern and southern distribution

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial



**Hungary:** 5. Apostag, 7. Baja–Szlatina, 13. Ballószög, 14. Bátmonostor–Szurdok part, 15. Battonya–Aradi Road I, 16. Battonya–Fővezeték II, 17. Battonya–Georgievics-tanya, 18. Battonya–Gödrösök, 19. Battonya–MOM Forgácsoló, 20. Battonya–Vörös Október Co-operative, 21. Berettyóújfalu–Nagy-Bócs-dűlő, 22. Békés–Délő, Szabó-tanya, 23. Békés–Délő, Csatornapart, 24. Békés–Hosszú sziget, 25. Békés–Maksári tanyák I, 26. Békés–Maksári tanyák II, 27. Békés–Maksári tanyák III, 28. Békés–Lápos dombi gátörház, 29. Békéscsaba–Alvégi-legelő, majorok, 30. Békéscsaba–Nagyret, Gerlai sarok, 31. Békésszentandrás–Pitye-gát, 32. Bélmegyer–Fehér hát, Metykó-tanya, 33. Bélmegyer–József Attila Street, 34. Bélmegyer–Kárász-megyer, Jónás-tanya, 35. Bélmegyer–Kárász-megyer, Gut-tanya, 65. Csanytelek–Rétoldal (Palé), 66. Csárdaszállás–Félhalom, 67. Csengele–Fecskés, 71. Csongrád–Saroktanya, 72. Csongrád–Sertéstelep, 73. Csongrád–Vidresziget, 74. Csólyospálos–Felsőpálos, Budai-tanya, 76. Debrecen–Bellegelő, 77. Debrecen–Bellegelő–Józsa, 78. Debrecen–Köntöskert, Bezerédj Street, 79. Debrecen–Szövetkezeti szőlőtelep, 80. Debrecen–Városi téglagyár, 81. Dévaványa–Tóker, 82. Doboz–Faluhelyi erdészház, 84. Drágszél, 85. Dunapataj–Parlag, 87. Dusnok–Várad, 90. Endrőd–Bogárzó, 91. Endrőd–Kocsorhegy, 92. Endrőd–Öregszőlők IV, 93. Endrőd–Paraj-hegyi-dűlő, 94. Endrőd–Rihés-halom, 95. Endrőd–Site 161, 104. Fajs–Fok, 105. Fajs–Garadomb, 106. Fajs–Kovácsalom, 108. Felgyő–Tábi-tanya, 113. Gáborján–Csapszékpart, 116. Gerla–Törpe ér, 117. Gyoma–Telki kerekő II, 118. Gyoma–Zichy Bala, 120. County Hajdú, 121. Hetényegyháza (Kecskemét)–Hobbikertek, 125. Hosszúpályi–Homokbánya, 126. Hódmezővásárhely–Barci-rét, 127. Hódmezővásárhely–Gorzsá-Cukor-tanya, 128. Hódmezővásárhely–Gorzsá-Kovács István-tanya, 129. Hódmezővásárhely–Solt-Palé-Égető Bálint-tanya, 130. Hódmezővásárhely–Szakálhát-Diószegi Imre földje, 131. Hódmezővásárhely–Szakálhát-Nagy Sándor földje, 135. Jánosszállás–Katonapart, 140–144. Kecel area, 145. Kecskemét–Szikra, 146. Kiskunfélegyháza–Kővágóér, 147. Kiskunhalas–collection of the Reformed Gymnasium, 148. Kismarja–Nagymarjai-dűlő, 149. Kisvárdá–34 Boldog-asszony Street, 150. Kiszombor–N, 151. Kiszombor–Nagyszentmiklósi Road, 152. Klárafalva area, 154. Kondoros–Hartyáni-dűlő, 160. Kunadacs–Köztemető, 161. Kunfehértó–Kovács-tanya, 162. Kunpeszér–Sinai-hegy, 168. Létavértes–6 Irinyi Street, 169. Magyarcsanak–Bökény, 170. Makó–Kis-Gencs-Lonovics-dűlő, 171. Makó–Vöröskereszt, 172. Makó area, 173. Mezőberény–Belenczérés, 174. Mezőberény–Belenczérés, Határ-zug, 175. Mezőgyán–Gépműhely, 177. Mezőkovácsháza, 180. Mezőpeterd–Gát-szeg-dűlő, 181. Miske–Telek, 187. Nagyhegyes–Elep 25, 195. Nyíregyháza–Morgó, 196. Nyíregyháza–Oros–Belterület, 197. Nyírgyulaj–Belterület, 198. Orgovány–Szelei-domb, 199. Orosháza–Pusztaföldvár–Nagyatársánc, 202. Örménykút–Palyó-tanya, 203. Örménykút–Szilai-halom, 217. Polgár–Király-érpart, 218. Polgár–Nagy Kasziba, 220. Pusztaszer–Felsőpusztaszer A, 229. Sövényháza–Kötörés, 232. Szabadszállás–Aranyegyháza, 233. County Szabolcs, 234. Szarvas–Bezinai szőlők II, 235. Szarvas–Bolza kastély, 236. Szarvas–Érpart, Sonkoly-tanya, 237. Szarvas–Káka–Kettőshalom, 238. Szarvas, 239. Szeged–Kiskundorozsma, Nagyszék I, 240. Szeged–Kiskundorozsma, Nagyszék II, 241. Szeged–Kiskundorozsma, Subasa, 242. Szeghalom–Dióér, 243. Szeghalom–Kisfás, 244. Szeghalom–Környe, 245. Szeghalom–Szeghalmi-mágor, 249. Szentes–Jaksorpart, 250. Szentes, 251. Between Szentes and Orosháza, 255. Székkutas–Diófás-dűlő, 272. Tiszabercel–Nagyret, 273. Tiszacsege, 274. Tiszacsege–Sóskás, 275. Tiszadada–Téglavető környéke, 281. Tiszasziget–Őszentiván-Site VIII, 282. Tiszavasvári–Paptelekhát, 284. Tótkomlós–Viharsarok TSZ, 288. Túrkeve area, 303. Vésztő–Pányád, 304. Vésztő–Hóta

**Romania:** 411. Berea–Platoul spanzuratoarei, 412. Carei–Bobald, 413. Ciumești–Bostănarie, 414. Ciumești–Via veche, 415. Foeni–Cimitirul Orthodox, 416. Foeni–Salaș, 417. Foeni–Fântâna Pășune, 418. Parța, 419. Periam, 420. Pișcolt–Nișipărie, 421. Stamora Moravița, 422. Timișoara–Freidorf, 423. Uivar–Gomila, 424. Valea lui Mihai, 425. Zimandu Nou

**Serbia:** 426. Čoka–Kremenjak, 427. Rabe–Ankasziget, 428. Stapar–Knežava bara



culture. He accordingly re-assigned a few sites earlier affiliated with the Nyírség culture to the Makó–Kosihy–Čaka culture and extended the latter’s eastern distribution to the Érmellék region, and the Berettyó and Körös Valleys.<sup>23</sup>

At roughly the same time, Gábor Bándi argued that the Makó–Kosihy–Čaka distribution was restricted to a narrow zone extending across central Hungary and south-western Slovakia, whose eastern boundary was marked by the Zagyva and Tisza.<sup>24</sup> In the late 1970s, Yugoslavian research agreed with Kalicz’s definition of the eastern boundary of the Makó–Kosihy–Čaka distribution.<sup>25</sup>

Two different views emerged regarding the cultural mosaic of the Early Bronze Age 1–2 and the period’s chronology in Hungarian prehistoric studies in 1990s, and the eastern border of the Makó–Kosihy–Čaka distribution was drawn accordingly. In Kalicz and Kalicz-Schreiber’s framework, the Makó culture was co-eval with Somogyvár–Vinkovci 1 and Glina III–Schneckenberg during the Early Bronze Age 1, and the culture’s boundary was drawn slightly farther to the east in the north-east, while the south-eastern border was modified in the light of the Somogyvár–Vinkovci sites in the Danube–Tisza Interfluvium and the Banat region, and thus the Makó presence in the south-east was marked by the sites in the Maros Valley.<sup>26</sup> In contrast, István Bóna regarded the Makó culture, which he correlated with the early Nyírség and late Vučedol cultures, as representing a transitional period extending over the greater part of the Carpathian Basin, bounded by the Hortobágy region and the Körös Valleys in the east, and by the Aranka Valley in the south.<sup>27</sup>

#### *The eastern distribution*

(north-western Romania, Counties Hajdú-Bihar and Szabolcs-Szatmár-Bereg; *Figs 2–3*)

Most of the known Makó–Kosihy–Čaka finds from north-western Romania come from inurned burials, such as the ones at Carei–Bobald (412), Foieni–Fântâna Pășune (417), Valeu Lui Mihai (424) and the five urn graves and two disturbed burials at Pișcolt–Nișipărie (420).<sup>28</sup>

Even though the archaeological evidence indicates that this region was settled by the Makó–Kosihy–Čaka culture<sup>29</sup> during the Early Bronze Age 1, some controversial phenomena must be noted here, such as the contacts with the slightly later, Early Bronze Age 2 Roșia group, distributed to the south. The finds from Pișcolt–Nișipărie included both Makó wares, such as interior decorated bowls, biconical bowls and handled pots, and slender handled amphorae of the type later appearing in the burials of the Roșia group.<sup>30</sup> The inhumation burials from Pișcolt–Nișipărie, which hardly contained any grave goods, were assigned to the Sanislău/Szaniszló phase of the Early Bronze Age 3.<sup>31</sup> The pottery from the published inhumation burials include a jug differing from the other pieces,<sup>32</sup> whose best parallels can be quoted from the cave sites of the Roșia group.<sup>33</sup> This burial can be assigned

<sup>23</sup> Kalicz (1981) Abb. 1; *idem* (1982) 128, Abb. 6; *idem* (1984a) 96.

<sup>24</sup> Bándi (1981) Taf. 12.

<sup>25</sup> Dimitrijević (1977–78) Abb. 1.

<sup>26</sup> Kalicz-Schreiber (1991) Abb. 8; Kalicz-Schreiber–Kalicz (1997) Abb. 1.

<sup>27</sup> Bóna (1992a) 16, “Frühe Bronzezeit I” map.

<sup>28</sup> Némethi (1979) 532–535; Némethi–Roman (1995) 25; Némethi (1996) 34; Dani (1998) 59; Kulcsár (1998) 44, Map 3. Bóna had earlier assigned these burials to the Nyírség culture: Bóna (1986) 26.

<sup>29</sup> Settlements identified during field surveys and stray finds: Ciumești–Bostănarie (413) and Berea–Plătoiu spanzurătoarei (411), Ciumești–Via veche (414).

<sup>30</sup> Némethi (1979) Fig. 3. 1.

<sup>31</sup> Némethi (1996) 36.

<sup>32</sup> *Ibidem* Fig. 7. 8.

<sup>33</sup> Emődi (1985) Fig. 10. 3.



to the group of poorly documented inhumation burials and stray finds reflecting cultural impacts from the south, which appeared at the end of the Makó–Kosihy–Čaka sequence and the beginning of the Nyírség culture on the northern fringes of the Great Hungarian Plain (the assemblages from Nagyhegyes–Elep [187] and Tiszacsege [273] too fall into this category). The cultural parallels point towards the Roşia group in the Sebes [Rapid] Körös region (and, indirectly, towards the Somogyvár–Vinkovci complex). The rite of these burials differs from the cremation graves of the Makó and Nyírség group, as well as from the ones of the Sanislău group.<sup>34</sup>

The Makó–Kosihy–Čaka sites in County Hajdú-Bihar are marked principally by stray finds of interior decorated bowls<sup>35</sup> and other pottery finds.<sup>36</sup> The pits of a settlement were uncovered in the Polgár area<sup>37</sup> on the left bank of the Tisza. A major settlement with burials of the culture was investigated at Berettyóújfalu–Nagy-Bócs-dűlő (21).<sup>38</sup> Three burials can be assigned to the Makó–Kosihy–Čaka culture from this region: the inurned burials from Debrecen–Köntöskert (78) and Gáborján–Csapszékpart (113), and a symbolic burial from Létavértes–6 Irinyi Road (168), whose rite is uncertain. The two inhumation burials uncovered at Nagyhegyes–Elep and Tiszacsege differ from the funerary practices of both the Makó–Kosihy–Čaka and the Nyírség cultures. Although the cultural attribution of the pottery from these two burials is uncertain, they certainly date from the close of the Makó–Kosihy–Čaka period and the turn of the Early Bronze Age 1 and 2. One intriguing hue in the colourful medley of the region's Early Bronze Age is represented by the burials found under the kurgan on the outskirts of Sárretudvari–Őrhalom.<sup>39</sup> The counterparts of the amphoras, jugs, the dagger, the copper axe and the golden lockring recovered from the graves can be found in the Corded Ware culture and Eastern Europe, as well as in the heritage of the Early Bronze Age groups of Transylvania.<sup>40</sup>

The stray finds of pot rim fragments and bowls with thickened rim from Tiszavasvári–Paptelkehát (282) in County Szabolcs-Szatmár-Bereg probably mark a one-time settlement. An inurned Makó–Kosihy–Čaka burial is known from Nyíregyháza–Oros (196). The burials generally assigned to the Nyírség culture include an unprovenanced urn from County Szabolcs, which had allegedly contained ashes, and a slender ovoid urn with four handles below the rim,<sup>41</sup> whose counterparts can be quoted from the inhumation burials of the Roşia group uncovered in Călăţea/Kalota Cave.<sup>42</sup> A similar vessel is known from one of the Makó–Kosihy–Čaka burials at Pişcolt–Nişipărie,<sup>43</sup> suggesting that the burial can be assigned to the Makó–Kosihy–Čaka culture.

The single classical Makó type interior decorated footed bowl comes from Tiszabercel–Nagyvér (272). Foot fragments and a plain footed bowl are known from Nyírgyulaj (197), Tiszadada (275) and an unknown site in the county (233). These bowls were earlier assigned to the Nyírség culture<sup>44</sup> or

<sup>34</sup> *Németi* (1996); *Dani* (1997a); *Németi–Dani* (2001).

<sup>35</sup> Debrecen–Bellegelő (76), Debrecen–Szövetkezeti szőlőtelep (79), unprovenanced finds from County Hajdú (120), Tiszacsege–Sóskás (274).

<sup>36</sup> Debrecen–Bellegelő–Józsa (77), Debrecen–Köntöskert (78).

<sup>37</sup> Polgár–Király-érpart (217), Polgár–Nagy Kasziba (218).

<sup>38</sup> A smaller settlement has been identified at Debrecen–Városi téglagyár (80), Hosszúpályi–Homokbánya (125), Kismarja–Nagymarjai-dűlő (148), Mezőpeterd–Gát-szeg-dűlő (180).

<sup>39</sup> *M. Nepper* (1991); *Ecsedy* (1994b) 40; *Lichardus–Vladár* (1996) 31; *Kalicz* (1998b) 174; *Dani–M. Nepper* (2006).

<sup>40</sup> Cp. *Dani–M. Nepper* (2006). For other analogies, cp. *Zimmermann* (2003); *Maran* (2008).

<sup>41</sup> *Kalicz* (1968) 68, 74, Taf. XVI. 7; *idem* (1984b) 113, Taf. XXVII. 7.

<sup>42</sup> *Németi–Roman* (1986) Fig. 12. 4.

<sup>43</sup> *Németi* (1979) Fig. 3. 1.

<sup>44</sup> *Kalicz* (1968) 66–68.



regarded as Makó imports,<sup>45</sup> although it was also suggested that the interior decorated bowls marked the eastern boundary of the Makó–Kosihy–Čaka distribution prior to the arrival of the Nyírség group.<sup>46</sup> The latter suggestion seems to be confirmed by the fact that interior decorated bowls have not been recovered from closed settlement features yielding typical Nyírség pottery.<sup>47</sup> However, this issue is far from resolved: knowing that the Nyírség style was to a large extent inspired by Vučedol wares, it seems most unlikely that the potters of the Nyírség culture were unfamiliar with interior decorated bowls. It must also be borne in mind that most of the currently known interior decorated bowls are stray finds without any context. Assuming that the Nyírség ceramic inventory does not include interior decorated bowls, a possible explanation for the lack of this ware might be sought in the culture's chronological position and cultural contacts. An interior decorated bowl from Nagyhalász–Királyhalom ornamented with cord impressions must be mentioned in this respect.<sup>48</sup> The origin of the population making these bowls and other cord-decorated wares from northern Hungary is uncertain, as is the date of their appearance and their role in the Early Bronze Age cultural development of the Carpathian Basin.<sup>49</sup>

In sum, we may say that the find assemblages recovered from closed settlement features in the Polgár area on the left bank of the Tisza indicate the settlement of the Makó–Kosihy–Čaka population prior to the emergence of the Nyírség culture in this region. The finds of the partially overlapping Makó–Kosihy–Čaka and Nyírség cultures were recovered from the same site at Polgár–Király-érpart (217), while in the case of two other neighbouring sites in the area, one only yielded finds of the Makó–Kosihy–Čaka culture (Polgár–Nagy Kasziba [218]), the other exclusively finds of the Nyírség culture (Polgár–Kengyel-köz).<sup>50</sup> The same sequence can be assumed in the Érmellék region during the Early Bronze Age 1–2, where burials of the Makó–Kosihy–Čaka culture have been found.

The archaeological record is patchy as regards the heritage of the various groups arriving to the area between the settlements along the Tisza and the burials in the Érmellék region at the dawn of the Bronze Age. Aside from a few stray finds of interior decorated bowls, the burials from the Debrecen area offer a few anchors in this respect. The graves from Gáborján and Létavértes, as well as Nyíregyháza–Oros to the north reflect a Makó–Kosihy–Čaka presence in these areas.<sup>51</sup> More recent research indicates the culture's intensive settlement south-east of Debrecen at Hosszúpályi and in the Berettyó Valley (Berettyóújfalu–Nagy-Bócs-dűlő, Kismarja, Mezőpeterd). The closed assemblages from these sites outline a uniform regional and chronological horizon reflecting the settlement of Makó–Kosihy–Čaka groups before the arrival of the earliest Nyírség communities.<sup>52</sup>

<sup>45</sup> Bóna (1986) 26.

<sup>46</sup> Kalicz (1981) 68–70; Kulcsár (1998) 43.

<sup>47</sup> A rim fragment of an interior decorated bowl was found together with stray finds of the Nyírség culture at Nyíregyháza–Morgó (195).

<sup>48</sup> Kalicz (1968) 42, Taf. I. 18.

<sup>49</sup> *Ibidem* 42; *idem* (1984b) 117–118; Bóna (1986) 27; Roman–Dodd–Oprîtescu–János (1992) 64; Bertemes (1998).

<sup>50</sup> Dani (1999) 68.

<sup>51</sup> Dani (1998); Kulcsár (1998); Dani (2001); Tóth (2003).

<sup>52</sup> Palaeoenvironmental studies have been conducted east of the northeastern boundary of the Makó–Kosihy–Čaka distribution at Nagyecsed, Bátorliget and Csaroda. Cp. Kiss (2004a); Dani (2005a); *idem* (2005b); Kiss–Kulcsár (2005b).



### *The southern and south-eastern distribution*

(Counties Bács-Kiskun, Békés, Csongrád; south-western Romania, northern Serbia; *Figs 2–3*)

The southern boundary of the Makó–Kosihy–Čaka distribution was initially placed in the Maros–Aranka Valley, based on the stray interior decorated bowls from Čoka–Kremenyák (426) and Periam (419), and a bird shaped askos from Rabe–Ankasziget (427).<sup>53</sup>

Florin Gogâltan has recently published a series of Early Bronze Age finds from the Romanian Banat,<sup>54</sup> most of which are stray finds collected during field surveys, and thus their dating value is rather low. The finds include rusticated pottery sherds from Foeni–Salaş (416) and fragments of interior decorated footed bowls decorated with encrusted triangles enclosed within lozenges made using the stab-and-drag technique,<sup>55</sup> suggesting that they represent simple variants of the popular Makó–Kosihy–Čaka bowls and can thus be taken to indicate the culture's southern sites.<sup>56</sup> A cemetery with what were probably inurned cremation burials uncovered at Zimandu Nou (425) north of the Maros can also be interpreted as the heritage of the Makó–Kosihy–Čaka culture. The pottery fragments from Timișoara–Freidorf (422), assigned to the Vučedol C period by the excavator, probably date from the same period. The recent investigation of the settlement and its burials at Uivar–Gomila (423) represented a major advance in the research of this region.

Some of these sites lie along the Maros (Periam and Zimandu Nou) others in the Temes and Bega Valleys (Foeni, Parța [418], Timișoara, Uivar–Gomila). The southernmost occurrence of Makó–Kosihy–Čaka pottery has been reported from Stamora Moravița (421), although even more southerly sites cannot be excluded in the light of the Makó–Kosihy–Čaka wares from Pančevo/Pancsova–Donja Varoš.<sup>57</sup> The earlier assumed Makó–Kosihy–Čaka boundary in the Aranka Valley can thus probably be drawn farther to the south. It must be borne in mind that the quoted interior decorated bowls differ from the similar bowl types of the Glina IV period<sup>58</sup> and the Somogyvár–Vinkovci complex,<sup>59</sup> their reliable cultural attribution can only be performed through comparison with assemblages containing a wide range of pottery wares recovered from secure contexts.

The Early Bronze Age population of the Serbian Banat region on the left Tisza bank is also uncertain; Makó–Kosihy–Čaka finds have only been reported from Čoka (426) and Rabe (427).

Gogâltan discarded the earlier chronological framework proposed by Petre Roman, who dated the Makó–Kosihy–Čaka culture to the Early Bronze Age 2, and accepted Horia Ciugudean's scheme in which the Makó–Kosihy–Čaka culture is assigned to the close of the Early Bronze Age 1 and

<sup>53</sup> The askos was earlier described as coming from Sövényháza in County Csongrád: *Banner* (1939) 84, Abb. 4. 5; *Kovács* (1972) 10. The reason for the change of the find spot was not specified: *Trogmayer–Vörös* (1994) 8; *Vörös* (1997) 125, cat. no. 3.

<sup>54</sup> *Gogâltan* (1995) 56, Abb. 1; *idem* (1996) 44–45, Pl. 1. It would appear that new Early Bronze Age sites have not been identified during the archaeological surveys in the Arad region: *Barbu et al.* (1999). For an overview of previous research: *Gumă* (1997).

<sup>55</sup> Foeni–Cimitirul Orthodox (415), Foeni–Salaş (416), Parța (418), Stamora Moravița (421).

<sup>56</sup> Cp. *Schuster* (1995) 45. While the elaborate, zoned design of the bowl from Periam (419) differs markedly from the simple decoration of the bowl fragments, its closest parallels in the Maros region are the interior decorated bowl from the inurned cremation burial found at Magyarcsanád–Bökény (169/c) and the bowl from Čoka–Kremenyák (426). These finds attest to the contemporaneous use of bowls with a sophisticated decoration and of more simple ones in the area, posing additional difficulties in the cultural attribution of stray find assemblages made up of interior decorated bowl fragments.

<sup>57</sup> *Grčki–Stanimirov* (1996) 73, Pl. II–IV.

<sup>58</sup> E.g. Ostrovul Corbului–Cliuci: *Roman* (1985) 121, Abb. 1. 1–4.

<sup>59</sup> Ostrikoval I.d: *Stojić* (1996) Pl. VI. 9, Pl. XII. 13; Pančevo/Pancsova–Donja Varoš (?): *Grčki–Stanimirov* (1996) 73, Pl. IV. 1.



the Early Bronze Age 1b–2a. The culture was coloured by cultural impacts from the Somogyvár–Vinkovci–Roşia complex in Early Bronze Age 2b.<sup>60</sup> This region is either left blank on the distribution maps made by Hungarian prehistorians,<sup>61</sup> or is regarded as representing the frontier between the early Somogyvár–Vinkovci and the Glina III–Schneckenberg distribution.<sup>62</sup> Together with the evidence for a Makó–Kosihy–Čaka and a sporadic Glina III presence,<sup>63</sup> recent finds of Sânpetru German type assemblages from the Banat incorporating both Somogyvár–Vinkovci and Makó–Kosihy–Čaka traits<sup>64</sup> tend to support a cultural patchwork in the region. At the same time, the exact date of the sites in question within the Early Bronze Age 1–2 is uncertain owing to the lack of finds from secure contexts. The archaeological record can equally well be interpreted as reflecting contemporaneity and consecutiveness.

There is little evidence for the nature of the Early Age Bronze occupation in the southerly areas of the Danube–Tisza Interfluvium and in the northern Bačka.<sup>65</sup> The sites of the Somogyvár–Ada group must be mentioned in this respect, one of which yielded a low, interior decorated bowl.<sup>66</sup> The simple incised design on the Senta/Zenta bowl is unique, and it cannot be conclusively affiliated with either the Makó–Kosihy–Čaka, or the Somogyvár–Vinkovci culture. In his overview of the ceramic inventory of the Ada group, Ferenc Horváth argued that this bowl can perhaps be interpreted as an indication of contact between the Ada group and the Makó–Kosihy–Čaka group.<sup>67</sup> In my view, however, this bowl can, similarly to the greater part of the Ada pottery (vessels with asymmetric handles, and vessels and jugs with divided handle (“Etagenhenkel”)) rather be taken as a reflection of the colourful cultural tapestry blending the most diverse traditions during the Somogyvár–Vinkovci/early Nagyrév/transitional or formative Nagyrév period succeeding the Makó–Kosihy–Čaka phase in the southern part of the Great Hungarian Plain.

The Early Bronze Age settlement history of the regions north of the Maros is similarly uncertain. In his 1968 monograph, Kalicz listed seventeen Makó sites in County Csongrád and three in County Békés.<sup>68</sup> This number has grown significantly in the past forty years. The grave pottery of the contracted inhumation burials from the Hódmezővásárhely area<sup>69</sup> has been re-assessed and these graves are now assigned to the earliest Nagyrév communities arriving to the Maros–Körös

<sup>60</sup> Roman (1986) 31; Ciugudean (1991) Abb. 35; Gogâltan (1996) 47; *idem* (1999b).

<sup>61</sup> Bóna (1992a) 16, “Frühe Bronzezeit I–II” map.

<sup>62</sup> Kalicz–Schreiber–Kalicz (1997) Abb. 1.

<sup>63</sup> Cultural impacts from the Glina III–Schneckenberg culture are indicated by a rim fragment decorated with a series of perforations from Silagiu/Nagyszilas: Gogâltan (1995) 56, Abb. 1. 3. The finds from the Ostrovul Corbului settlement and their interpretation suggest that the southern Banat and the Danube Gorges area were settled by Glina IV–Schneckenberg communities after the late Coţofeni/late Vučedol period. Cp. Roman (1985) 118; *idem* (1988) 217.

<sup>64</sup> Sânpetru German/Németszentpéter: Gogâltan (1995) 57, Abb. 2–3; *idem* (1996) 47, Pls 2–3.

<sup>65</sup> Stăpar–Kneževa Bara (428): Koledin (2007); Cp. Titel/Mošorin area: Falkenstein (1998) 36, 77; Medović (1998) 147–148.

<sup>66</sup> Horváth (1984a) 15, Pl. VI. 3–4.

<sup>67</sup> *Ibidem* 25.

<sup>68</sup> Kalicz (1968) 77–78: County Csongrád: Csongrád–Saroktanya, Hódmezővásárhely–Gorzsá-Kovács-tanya and Cukor-tanya, Hódmezővásárhely–Kotacpart, Hódmezővásárhely–Kökénydomb, Hódmezővásárhely–Solt Palé, Hódmezővásárhely–Szakálhát–Diószegi-tanya and Nagy-tanya, between Kunszentmárton and Szentes, Magyarcsanak–Bökény, Makó–Vöröskereszt, Pusztaszer, Sövényháza, Szentes-Berek, Szentes-Jaksor, Szentes area, Tiszasziget–Ószentiván. County Békés: Mezőkovácsháza, Orosháza–Pusztaföldvár–Nagyatársánc, between Orosháza and Szentes.

<sup>69</sup> Hódmezővásárhely–Kotacpart, Hódmezővásárhely–Kökénydomb, Szentes-Berek: *Gazdapusztai* (1957) 79–80, Pl. XVIII. 5–8, Pl. XIX. 1–5, 8, Pl. XIX. 10.



Interfluve.<sup>70</sup> The bird shaped askos, formerly believed to have been found at Sövényháza, is now believed to come from Rabe. Recent salvage excavations in County Csongrád over the past ten years has led to a welcome rise in the number of sites.<sup>71</sup> The number of sites known from County Békés has also grown due to the excavations in the Battonya area and the systematic field surveys in the Békés, Szarvas and Szeghalom districts, all lying along the Körös.

The systematic mapping of the archaeological sites in County Békés allows the reconstruction of Early Bronze Age settlement patterns in this region (*Fig. 3*). One intriguing result of the survey is that the number of Bronze Age sites that cannot be attributed to a particular culture is conspicuously high.<sup>72</sup> Altogether 166 culturally indeterminate Bronze Age sites were identified in the Békés and Békéscsaba area, accounting for one-third of all the Bronze Age sites;<sup>73</sup> nineteen of these could be broadly dated to the Early Bronze Age. Sixteen sites were assigned to the Makó-Kosihy-Čaka culture, the lowest number among the sites with a secure cultural affiliation.<sup>74</sup> This number is even more insignificant considering the nature of these sites and their finds, indicating small, dispersed settlements. The Makó-Kosihy-Čaka sites show a concentration in the Körös Valleys, roughly corresponding to the Baden distribution in that region. The location of the Baden settlements and the kurgans in the Körös Valleys seems to complement each other, as if the two populations deliberately avoided each other. A similar pattern can be noted in the Dévaványa, Füzesgyarmat and Vésztő area. There is only one single site in the area devoid of any Late Copper Age occupation in the Körös Valleys, whose finds reflected a Makó-Kosihy-Čaka presence.<sup>75</sup> The scanty Makó-Kosihy-Čaka pottery collected on the surface of Late Copper Age kurgans suggests some sort of contact between the Late Copper Age (or perhaps Early Bronze Age) Yamnaya population and the Makó-Kosihy-Čaka culture.<sup>76</sup>

The archaeological record indicates that the Mezőség area was virtually uninhabited during the Early and Middle Bronze Age, except for the two Early Bronze Age sites identified on the outskirts of Telekgerendás.<sup>77</sup> There is no evidence whatsoever that the area was inhabited after the Makó-Kosihy-Čaka period.

None of the larger sites in County Békés have been archaeologically investigated. A smaller excavation was conducted on twelve settlements, most of which were made up of one or two pits.<sup>78</sup>

<sup>70</sup> Csányi (1982–83) 55.

<sup>71</sup> Cp. Kulcsár (1997) 38–42. For more recent studies, cp. Tóth (2001a); *idem* (2001b); *idem* (2002); Szalontai-Tóth (2003a); *idem* (2003b); Tóth (2003); Balogh-Türk (2004); Szabó (2004); Tóth (2004).

<sup>72</sup> Of the Early Bronze Age sites identified during the archaeological field surveys conducted in County Békés, only those were listed among the sites of the Makó-Kosihy-Čaka culture, which could be unambiguously assigned to the culture based either on the published finds or on the available documentation. I am greatly indebted to István Torma of the Hungarian Archaeological Institute and my colleagues in the Institute's Archaeological Archives for their generous help in fine-tuning my data.

<sup>73</sup> MRT 10, 20, 713.

<sup>74</sup> For example, twenty-three sites were assigned to the Ottomány culture and forty-three to the Gyulavarsánd culture.

<sup>75</sup> Stray finds from the kurgan at Csárdaszállás-Félhalom (66): MRT 10, 376–378, Site 4/10, Pl. 15. 5–6.

<sup>76</sup> Finds of the Makó-Kosihy-Čaka culture were collected on or in the area of the following kurgans: several Makó-Kosihy-Čaka fragments, including the rim fragment of an interior decorated bowl, at Endrőd-Ríhes-halom (94); finds from a pit of the Makó-Kosihy-Čaka culture found at the base of the kurgan at Örménykút-Szilai-halom (203, Pl. 2); finds of the Nyírség culture were found among the stray finds from the kurgan at Gyoma-Egei-halom (MRT 8, 220, Site 4/121), while Early Bronze Age scored and incised sherds were collected on and in the area of the kurgan at Szeghalom-Geszlencs-halom: MRT 6, 147, Site 11/44.

<sup>77</sup> MRT 10, 20.

<sup>78</sup> About seventeen Makó-Kosihy-Čaka sites were identified by the presence of interior decorated bowl fragments among the stray finds collected during field surveys, and an additional twenty sites by the occurrence of scored or rusticated household pottery.



A single pit provided evidence for Makó–Kosihy–Čaka occupation at the Doboz (82), Endrőd–Site 161 (95), Mezőgyán–Gépműhely (175), Mezőkovácsháza (177) and Szarvas–Bezinai szőlők II (234) sites. The ca. 5000 m<sup>2</sup> large area investigated at Szeghalom–Környe (244) too yielded a single pit of the Makó–Kosihy–Čaka culture.

The sites along a the Száraz Stream, a former Maros channel in the Battonya area, would seem to represent a relatively more densely settled settlement zone, although this can probably be explained by the more intensive research in this area. Two pits lying 250 m apart were uncovered at Battonya–Aradi Road I (15); another two pits spaced 53 m apart were found some 2 km to the west, at the Battonya–Fővezeték II (16) site. The settlement site at Battonya–Georgievics-tanya (17), yielding a pit and stray finds, lies about 1–2 km away from the former. The pit lay on the modern floodplain, which is periodically inundated with water.<sup>79</sup> Two Makó–Kosihy–Čaka pits were uncovered in the 200 m wide area separating the Early and Middle Bronze Age cemetery uncovered in the one-time sandpit at Battonya–Vörös Október Co-operative (20). These sites were not co-eval, the earliest being the ones at Battonya–Fővezeték II and Vörös Október Co-operative, while the other two roughly contemporaneous sites at Aradi Road I and Georgievics-tanya represent the end of the Makó–Kosihy–Čaka sequence.

Two assemblages perhaps also originate from graves: an interior decorated bowl and two jugs from Szarvas–Bolza kastély (235), and a stray find of an urn, perhaps part of the grave pottery from a burial (Szarvas [238]). The single well documented cremation grave, found at Békéscsaba–Alvégi legelő, majorok (29), was earlier assigned to the Gyula–Roşia group on the basis of the grave pottery (a handled jug with cylindrical neck and a bowl: *Pl. I. 2–3*).<sup>80</sup> It must in all fairness be noted that the burial cannot be unreservedly assigned to the Makó–Kosihy–Čaka culture. Strong cultural impacts from the Somogyvár–Vinkovci groups in Transdanubia and along the Danube can be assumed in this region. The two vessels are not typical in the currently known corpus of Roşia wares and the rite of the burial too belies this cultural attribution.<sup>81</sup> The cremation rite would rather suggest the influence of the Makó–Kosihy–Čaka population. This grave can be linked to the changes occurring at the onset of the Early Bronze Age 2, reflected by the appearance of Somogyvár–Ada, Roşia (earlier labelled Gyula–Roşia) assemblages in the southern part of the Great Hungarian Plain.

Two stray finds, which can perhaps be assigned to the Makó–Kosihy–Čaka culture, provide evidence for Early Bronze Age metallurgy. Local metal production is indicated by the mould fragment for a shaft-hole axe from Endrőd–Paraj-hegyi-dűlő (93), while the finished weapon itself, a shaft-hole axe of the Fajsz type, was found at Szeghalom–Varjas-major.<sup>82</sup>

The cultural attribution of the sites in County Békés and their chronological position are often uncertain. The finds from the pit at Mezőgyán–Gépműhely included typical Makó–Kosihy–Čaka wares found together with a small conical bowl and a larger bowl, which differ from the culture's typical vessels.<sup>83</sup> The design of the interior decorated bowl suggests a date in the early Makó–Kosihy–Čaka period.<sup>84</sup>

There are still many uncertainties in the interpretation of the Early Bronze Age 1–2 sites in the Battonya area (15–20). The divided handle fragments found among the pottery sherds from Pit 1 at

<sup>79</sup> Bondár–D. Matuz–Szabó (1998) 29.

<sup>80</sup> Nikolin (1991) 75, Fig. 2; Bóna (1992a) 15; MRT 10, 211–212, Site 2/189, Fig. 41.

<sup>81</sup> For a recent overview of the Gyula–Roşia group, cp. Molnár–Ghemis (2003).

<sup>82</sup> MRT 6, 152, Site 11/61.

<sup>83</sup> G. Szénásky (1987–88) Fig. 10. 7, Fig. 11. 2–3.

<sup>84</sup> *Ibidem* Fig. 11. 1a–b.



Battonya–Aradi Road<sup>85</sup> resemble the handles on the jugs and mugs from the southern Transdanubian sites of the Somogyvár–Vinkovci culture and the Somogyvár–Ada sites in the southern part of the Danube–Tisza Interfluve.<sup>86</sup> A similar handle was found in Pit 2 of the Makó–Kosihy–Čaka settlement at Tiszakürt–Homoki szőlő.<sup>87</sup> The easternmost and northernmost occurrences of this handle type thus come from sites yielding characteristic Makó–Kosihy–Čaka wares (such as bowls and pots).<sup>88</sup> Even though a strong Somogyvár–Vinkovci influence can be demonstrated, the settlements can nonetheless be assigned to the late Makó–Kosihy–Čaka period. The finds from Battonya–Georgievics-tanya fall into the same category, similarly to the assemblage from Szarvas–Bolza kastély, where two handled mugs of the Somogyvár–Vinkovci type were found.<sup>89</sup> The pottery from Szeghalom–Környe too reflects intensive cultural impacts from the Somogyvár–Vinkovci complex.<sup>90</sup>

Thirty sites can be assigned to the Makó–Kosihy–Čaka culture in County Csongrád (*Figs 2–3*), complemented by two stray finds of Early Bronze Age shaft-hole axes.

Most of the known settlement are located on the right bank of the Tisza: seventy pits and wells of a settlement were uncovered at Csengele–Fecskés (67), twenty-seven pits at Szeged–Kiskundorozsma-Subasa (241), twelve pits at Csongrád–Saroktanya (71), nine pits at Csongrád–Sertéstelep (72), eight pits at Szeged–Kiskundorozsma-Nagyszék I (239), five pits at Jánosszállás–Katonapart (135), and one pit at Felgyő–Tábi-tanya (108). The currently known single building, a sunken, timber-framed house, was uncovered at Csongrád–Vidresziget (73). Stray finds indicating settlements have been reported from two other sites, Csanytelek–Rétoldal (65) and Sövényháza–Kötörés (229), also on the river's right bank.

Several smaller settlements, represented by a handful of pits, are known from the Hódmezővásárhely area on the river's left bank, which had been intensively investigated in the 1930s.<sup>91</sup> Stray finds indicating two additional sites are known in the broader Hódmezővásárhely area,<sup>92</sup> four sites in the Maros Valley,<sup>93</sup> and three sites south of the Maros.<sup>94</sup> A few pits and ovens of a settlement were uncovered at Kiszombor–Nagyszentmiklósi Road (151). Two vessels with asymmetrical handles, both stray finds from the broader Kunszentmárton and Szentes area (163, 251), can probably also be assigned to the Makó–Kosihy–Čaka culture.

The known graves are all cremation burials. Symbolic and inurned burials were brought to light at the eponymous site of Makó–Vöröskereszt (171) and Hódmezővásárhely–Gorzsa-Cukor-tanya (127), while the vessels found at Hódmezővásárhely–Gorzsa-Kovács István-tanya (128) probably came from a symbolic burial. The inurned burial at Magyarcsanád–Bökény (169/c) yielded a pin fragment of copper or bronze. The more or less intact interior decorated bowls from two sites in

<sup>85</sup> *Ibidem* Fig. 5. 1.

<sup>86</sup> E.g. at Ada and Radanovac: *Horváth* (1984a) Pl. I. 1–2, as well as Szava: *Ecsedy* (1979a) Taf. VII. 3, Taf. IX. 3.

<sup>87</sup> *Csányi* (1996) 55, Pl. II. 4, Pl. XV. 3.

<sup>88</sup> *G. Szénásky* (1987–88) Fig. 5. 2, 7–9, Fig. 6. 2, Fig. 7. 2, Fig. 8. 3; *Csányi* (1996) Pl. II. 1–2, 7–8.

<sup>89</sup> MRT 8, 403, Site 8/25.e, Pl. 19. 6; an unpublished piece resembling a variant from Ivanka pri Nitre (*Vladár* [1966] Abb. 28. 1) and a decorated variant from Szava: *Ecsedy* (1979a) Taf. I. 4.

<sup>90</sup> *G. Szénásky* (1987–88) 146, 152, Fig. 8. 1–2, 4, 6.

<sup>91</sup> Hódmezővásárhely–Solt-Palé-Égető Bálint-tanya (129), Hódmezővásárhely–Szakálhát-Diószegi Imre földje (130). Later Hódmezővásárhely–Barci-rét (126).

<sup>92</sup> Hódmezővásárhely–Szakálhát-Nagy Sándor földje (131), Székkutas–Diófás-dűlő (255).

<sup>93</sup> Magyarcsanád–Bökény (169), Makó–Kis-Gencs-Lonovics-dűlő (170), Makó–Vöröskereszt (171), Makó area (172).

<sup>94</sup> Kiszombor–N (150), Klárafalva area (152), Tiszasziget–Ószentiván VIII (281).



the Szentes area (Szentes–Jaksorpart [249], Szentes [250]) and the one from Pusztaszer (220) may similarly have originated from burials.

A stray shaft-hole axe from the Hódmezővásárhely area,<sup>95</sup> and a hoard of two shaft-hole axes and a small flat chisel from Tápe<sup>96</sup> represent the products of the new Early Bronze Age metalwork in the region.

The Early Bronze Age sites in the northern part of the Kiskunság region in County Bács-Kiskun (Figs 2–3) are principally known from a few partially published assemblages and scattered references. Kalicz listed three sites in his 1968 monograph;<sup>97</sup> in 1990, Elvira H. Tóth published a catalogue of the Early Bronze Age sites in the county, in which six sites were assigned to the “Zók” and Makó–Kosihy–Čaka cultures, while five other sites were broadly dated to the Early Bronze Age.<sup>98</sup> A recent overview by Katalin Tóth of the region’s Early Bronze Age 1–3 sites, based on the finds in the Kiskunhalas and Kiskunfélegyháza museums and the local history collection in Jánoshalma, as well as the scattered references in the archaeological literature, lists nineteen sites of the Makó–Kosihy–Čaka culture.<sup>99</sup> A total of twenty-six sites are currently assigned to the Makó–Kosihy–Čaka culture in County Bács-Kiskun.

The laconic excavation reports mention two sites, Ballószög (13) and Hetényháza (121), where a handful of pits indicated the culture’s settlement. Similar pits were uncovered at Kiskunfélegyháza–Kővágóér (146) and at Kunadacs–Köztemető (160), one of which contained two post-holes, and a 6 m by 10 m large building was found too. Fragments of vessels placed into one another were found in beehive shaped pits at Orgovány–Szelei-domb (198). A detailed description of the various settlement features and the finds excavated at these sites is sadly lacking. Only the pottery of a pit from Kunfehértó–Kovács-tanya (161) has been published. Stray finds indicating a settlement are known from several sites.<sup>100</sup>

The inurned cremation burial uncovered at Kunpeszér–Sinai-hegy (162) in 1961 stands out from among the known burials since it contained two interior decorated bowls and a cylindrical flask in addition to the urn. The preliminary report on the rescue excavation conducted at Ballószög (13) mentions cremation burials with mugs, as well as contracted inhumation burials without any grave goods and the various features of an Early Bronze Age settlement. Two stray finds of more or less intact interior decorated bowls from Kecskemét–Szikra (145) and Kiskunhalas–collection of the Reformed Gymnasium (147) perhaps also came from burials in view of their intact condition.

The shaft-hole axes from Fajsz and Akasztó can probably be assigned to the Makó–Kosihy–Čaka culture.<sup>101</sup>

<sup>95</sup> Szeremlei (1900) 212, Fig. 17. 1; Kovács (1996) 116, note 4; V. Szabó (1999) 54, Fig. 1. 1.

<sup>96</sup> Kovács (1996) 116, note 4, Abb. 2; V. Szabó (1999) 54, Fig. 1. 2.

<sup>97</sup> Kecskemét–Szikra, Kiskunhalas–collection of the Reformed Gymnasium, Kunpeszér–Sinai-hegy: Kalicz (1968) 78, Fo. 19, 23, 26.

<sup>98</sup> H. Tóth (1990). The finds from Attila Horváth’s rescue excavations conducted since the 1960s are still unpublished, cp. Horváth (1984b) 5; *idem* (1988).

<sup>99</sup> Tóth (1997); *idem* (1998a); *idem* (1998b).

<sup>100</sup> Apostag (5), Baja–Szlatina (7), Bátmonostor–Szurdokpart (14), Csólyospálos–Felsőpálos (74), Drágszél (84), Dunapataj–Parlag (85), Dusnok–Várad (87), Fajsz–Fok (104), Fajsz–Garadomb (105), Fajsz–Kovácsshalom (106), Kecel area (140–144), Miske–Telek (181), Szabadszállás–Aranyegyháza (232).

<sup>101</sup> Fajsz: Hampel (1903) 426–427; Kalicz (1968) Taf. I. 16–17, 19–21. Akasztó: Kovács (1996) 116. Abb. 1.



The above overview clearly shows that the south-easterly regions of the Great Hungarian Plain were settled by Makó–Kosihy–Čaka communities in the Early Bronze Age 1. Similarly to the entire Makó–Kosihy–Čaka distribution, the most important anchor for the cultural attribution of the stray finds from Counties Békés and Csongrád is the appearance of interior decorated footed bowls, which do not simply represent one of the culture's most typical wares, but also serve as reliable chronological markers. Knowing that interior decorated bowls do not occur in the closed assemblages of the Nyírség culture, finds of this type from eastern Hungary can be regarded as the heritage of the Makó–Kosihy–Čaka culture. Several assemblages containing interior decorated bowls collected during the field surveys in the northern part of County Békés can likewise be assigned to the Makó–Kosihy–Čaka culture. Interior decorated bowls were often deposited in burials (the grave pottery from four of the ten graves<sup>102</sup> known from Counties Békés and Csongrád contained such vessels), confirming earlier observations that the deposition of these bowls in burials was an important element of the Makó–Kosihy–Čaka burial rite, even though this ware is not exclusive to burials since it has been found on settlements too.<sup>103</sup> It must here be noted that the grave pottery of one burial which did not contain an interior decorated bowl (Hódmezővásárhely–Gorzsa-Cukor-tanya [127]) was made up of an urn, a mug, a plain bowl and a vessel with asymmetrical handles. A similar vessel with asymmetrical handles was recovered from the cremation burial at Hajdukovo/Hajdújárás, assigned to the Ada group;<sup>104</sup> vessels of a different type, but similarly fitted with asymmetrical handles, are known from the inhumation burials in the northern distribution of the Makó–Kosihy–Čaka culture.<sup>105</sup>

The internal chronology of the Makó–Kosihy–Čaka sites is uncertain. An early phase betraying strong Vučedol influences can certainly be distinguished,<sup>106</sup> principally on the basis of the interior decorated bowls, whose decorative motifs and design are more elaborate than the bowls from other areas of the Makó–Kosihy–Čaka distribution.<sup>107</sup>

The perceptible rise in Somogyvár–Vinkovci type wares on Makó–Kosihy–Čaka sites at the close of the Early Bronze Age 1 suggests increasingly closer cultural contacts or perhaps even smaller migrations from southern Transdanubia. It is unclear, however, whether the assemblages of

<sup>102</sup> Hódmezővásárhely–Gorzsa-Kovács-tanya (128), Magyarcsanak–Bökény (169/c), Makó–Vöröskereszt (171), Szeged–Kiskundorozsma, Subasa (241).

<sup>103</sup> Assemblages from closed pits often contain this characteristic ware, although in a more fragmented condition: e. g. Csongrád–Saroktanya, Pits 2 and 5: *Gazdapusztai* (1966) Fig. 7. 1–3, 11; Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. III. 1–2; Jánosszállás–Katonapart, Pit 18/a: *Kürti* (1974) 31, Fig. 4; Mezögyán–Gépműhely: *G. Szénászký* (1987–88) 146, Fig. 11. 1a–b; Örménykút–Szilai-halom: MRT 8, Site 7/6, Pl. 2. 1, 3, in this volume.

<sup>104</sup> *Horváth* (1984a) 13, Pl. III. 1, Pl. IV. 1.

<sup>105</sup> Budapest–Szentmihályi Road (57), Tarnaszánya (260), Ivanka pri Nitre (331). The finds of the Roşia group recovered from caves can likewise be regarded as the grave goods of inhumation burials: *Emődi* (1985); *Emődi–Halasi* (1985). Cp. *Kalicz-Schreiber* (1991).

<sup>106</sup> A few stray finds, such as the ones from Kiszombor, indicate contact with the late Vučedol culture: *Kürti* (1974) 46, Fig. 25. It seems likely that the controversial vessel from Öttömös (*Horváth* [1985] Pl. I. 6) variously attributed to different cultures, can be assigned to the late Vučedol complex.

<sup>107</sup> E.g. the lavishly ornamented bowls from Szarvas–Bolza kastély (235) and Mezögyán–Gépműhely (175), the bowls decorated on both the exterior and interior from Csanytelek–Rétoldal (65), Hódmezővásárhely–Szakálhát (130) and Solt–Palé (129), which differ from the traditional Makó–Kosihy–Čaka bowls and bespeak stronger ties with the late Vučedol and early Somogyvár–Vinkovci bowl types from southern Transdanubia and the Drava–Sava Interfluve.



this type reflect a mixed Makó–Somogyvár–Vinkovci population or the settlement of a group related to the Somogyvár–Vinkovci culture. The sites of the Somogyvár–Ada group, the late settlement finds from Hódmezővásárhely–Barci-rét (126) and the assemblage from Battonya–Aradi Road (15) and Békéscsaba–Alvégi-legelő (29) point towards southern Transdanubia and the Srem, suggesting an interaction between the two cultures, which eventually led to the formation of the Nagyrév culture in the westerly areas of the Maros–Körös Interfluve.<sup>108</sup> In the northern part of County Békés we witness the continuous expansion of the Nyírség culture.<sup>109</sup>

The Makó–Kosihy–Čaka sites show a random scatter in the Maros–Körös Interfluve. In the more intensively researched areas, such as Battonya, Endrőd, Gyoma and Hódmezővásárhely, several concentrations of smaller settlements can be noted. Although there is scanty evidence for the presence of the Makó–Kosihy–Čaka culture in the sandy region of the Danube–Tisza Interfluve, more intensive occupation can be documented to the east along the Tisza and in the Maros, Körös and Berettyó Valleys, on the high bluffs overlooking the rivers and the one-time streams. A scattered occupation can be noted on the sandy ridge between the Maros and Körös Rivers (Örménykút: 202, 203). The number of Makó–Kosihy–Čaka sites in the systematically surveyed northern areas of County Békés is low compared to the number of sites identified from other periods and the region's site density resembles that of the preceding Baden period.<sup>110</sup> One conspicuous feature is the occurrence of typical Makó–Kosihy–Čaka wares on or in the immediate vicinity of kurgans dating from a slightly earlier period.

The eastern boundary of the Makó–Kosihy–Čaka distribution lay in the Mezőgyán area. While we know that the Körös Valley section in western Romania was occupied by the Roşia group during the Early Bronze Age 2,<sup>111</sup> there are no sites from the preceding Early Bronze Age 1, which would indicate contacts with the Makó–Kosihy–Čaka group.

The southern and eastern boundary of the Makó–Kosihy–Čaka distribution can thus be drawn along the Timiş/Temes Valley–Arad–Battonya–Gáborján–Érmellék region line. The strongly mixed nature of the assemblages from south-eastern Hungary indicates intensive contacts with the cultures of southern Transdanubia and the Drava–Sava Interfluve, perhaps even a mixing between the two populations. Spanning the Early Bronze Age 1–2a, the Makó–Kosihy–Čaka sequence can be divided into an early and a late phase, whose precise chronology will hopefully be established by means of find assemblages from secure contexts.

<sup>108</sup> Csányi (1982–83) 58–59; Cp. Horváth (1984a) 25.

<sup>109</sup> Indicated by the southernmost sites of the Nyírség culture at Füzesgyarmat–Csukás ér: MRT 6, Site 5/24, Pl. 24. 3; Füzesgyarmat–Szomjú-hát: MRT 6, Site 5/31; Füzesgyarmat–Varga-zug: MRT 6, Site 5/69; Gyoma–Egei-halom: MRT 8, Site 4/121; Körösladány: MRT 6, 121, Site 7/<sup>xxx</sup>; Vésztő–Vadas: MRT 6, Site 12/65, Pl. 24. 1; Gerla-Nagy tanya (?): G. Szénásky (1987–88) 146, Figs 2–3. Cp. Dani (1997b); Tóth (2003); Dani (2004); *idem* (2005c).

<sup>110</sup> MRT 6, 9; MRT 8, 24–25.

<sup>111</sup> Emődi (1985); Roman–Németi (1986); Molnár–Ghemis (2003).

## ***Region II. The northern areas of the Great Hungarian Plain and northern Hungary***

(Counties Borsod-Abaúj-Zemplén, Heves, Jász-Nagykun-Szolnok and Nógrád; *Fig. 2, Fig. 4*)

### *The Middle Tisza region*

(County Jász-Nagykun-Szolnok; *Fig. 2, Fig. 4*)

Kalicz assigned three stray finds (Tisza)Örvény–Temetődomb (279), Rákóczifalva (221) and the Tiszafüred area (276) in County Jász-Nagykun-Szolnok in the Middle Tisza region to the Makó–Kosihy–Čaka culture.<sup>112</sup>

The number of known sites has not risen dramatically. Altogether ten Makó–Kosihy–Čaka sites are known.<sup>113</sup> No new sites were identified in the region's north-eastern part, in the Jászság, while traces of settlement were identified during the field surveys conducted east of the Tisza in the Tiszazug region (Kunszentmárton [164]) and in the Túrkeve area (288).<sup>114</sup> With the exception of the burial from Jászdózsa–Kápolnahalom (136) in the northern part of the Great Hungarian Plain and the settlement at Túrkeve, most of the sites lie along the eastern bank of the former Tisza channel. Three smaller settlements are known: five pits have been reported from Tizsakürt–Homoki szőlő (277), a larger complex of ten refuse pits and a sacrificial pit has been uncovered at Tizsapüspöki–Karancs-Háromág (280), and a larger pit and an inurned burial were brought to light at Rákócziújfalú–Felsővarsány (222). The intact two-handled amphora from neighbouring Rákóczifalva (221) most probably marks a burial site. The scattered cremation burial dug into the natural subsoil under the tell settlement at Jászdózsa–Kápolnahalom (136) remained unpublished for a long time. Bóna interpreted this burial as a grave from a Makó–Kosihy–Čaka cemetery.<sup>115</sup>

The pottery from the Tizsakürt settlement comprises typical Makó–Kosihy–Čaka wares, as well as vessels showing affinities with Somogyvár–Vinkovci pottery types. These include the fragment of a divided handle and an intact and fragmentary mug/jug of the Vinkovci type.<sup>116</sup> The burial under the Jászdózsa–Kápolnahalom tell settlement can be taken as reflecting the presence of a late Makó population on the northern fringes of the Great Hungarian Plain. The grave goods included a jug of a population related to the Somogyvár–Vinkovci complex, which can perhaps be identified with the early Nagyrév group.<sup>117</sup> No matter how scanty the finds from this region, it seems quite certain that this region acted as a major link between Transdanubia, the Danube–Tisza Interfluve and north-eastern Hungary during the Early Bronze Age 1–2.

### *Northern Hungary*

(Counties Borsod-Abaúj-Zemplén, Heves and Nógrád; *Fig. 2, Fig. 4*)

For a considerably long time, only sites and finds of the Nyírség group were known from County Borsod-Abaúj-Zemplén in north-eastern Hungary.<sup>118</sup> Of these, the stray mug from Gelej–Kanálisdűlő is now assigned to the Makó–Kosihy–Čaka culture.<sup>119</sup> Until recently, only a few stray finds

<sup>112</sup> Kalicz (1968) 79, Fo. 33, 35, 36.

<sup>113</sup> Csányi (1982–83) 59, note 32, mentions finds from pits of the Makó–Kosihy–Čaka culture uncovered at Rákóczifalva–Kastélydomb and Tizsaszőlős–Csákányszeg. Nothing more is known about these finds.

<sup>114</sup> Csányi (1996) 45, note 9.

<sup>115</sup> Stanczik (1988) 41–42; Bóna (1992a) 22.

<sup>116</sup> Csányi (1996) 56, Pl. II. 4, Pl. XII. 6, Pl. XIV. 4.

<sup>117</sup> Dani–Kulcsár (2000).

<sup>118</sup> Kalicz (1968) 68–69, Fo. 94–120. Cp. also Dani (2005c) for new data.

<sup>119</sup> Kalicz (1998a) 11. Cp. also Kalicz (1968) 69, Fo. 116, Taf. XXVII. 11; Bóna (1975a) Taf. 193. 13.







Aranyhegyi Road, Mocsáros, **50.** Budapest, III–Békásmegyer, **51.** Budapest, III–Békásmegyer (BUVÁTI), **52.** Budapest, III–293 Királyok Road, **53.** Budapest, XI–Budaörs Airfield, **54.** Budapest, XI–Kőérberek, **55.** Budapest, XI–Vasvári-laktanya, **56.** Budapest, XIV–Péceli Road, **57.** Budapest, XIV–Szentmihályi Road, **58.** Budapest, XVII–Rákosszaba, Péceli Road, **59.** Budapest, XVII–Rákoskeresztúr, **60.** Budapest, XXII–Kamaraerdő, **61.** Cegléd–Bába-Molnár, Hartyáni-dűlő, **62.** Cegléd–Intézeti and Bába-Molnár-dűlő, **63.** Cegléd–Bürgeházi-dűlő, **64.** Cegléd–Réti-dűlő, **83.** Domony–J. Roob’s garden, **103.** Érd–Site 1, **107.** Farnos–Kása-dűlő, **109.** Fót–Konya-Monya, **111.** Galgamácsa–Homokbánya, **112.** Galgamácsa–43 Kossuth Lajos Street, **132.** Ipolytölgyes–Szentmárton-dűlő, **133.** Ipolytölgyes–TSz-major, **156.** Kosd–Házhelyek, **188.** Nagykovácsi–Remete-hegy cave, **189.** Nagykovácsi–Remete-hegyi zomboly, **206.** Páty–Hegyi-dűlő, **207.** Penc–Hosszú-völgy, **208.** Perbál–Malomföldek, **209.** Perbál–Töki-határföldek, **210.** Perbál–Zsidó-földek, **211.** Perőcsény–Útelágazás, **212.** Perőcsény–Jancsi-hegy, **219.** Pomáz–Új-dűlő, **226.** Solymár–Krautgarten-dűlő, **246.** Szentendre–Belterület, **247.** Szentendre–HÉV-végállomás, **248.** Szentendre–Papsziget, **256.** Szigetmonostor–Felső-rétek, **257.** Szigetszentmiklós–Vízcsőárok II, **266.** Tápiószéle, **267.** Tápiószéle–Szkíta temető, **285.** Tök–Belterület, **286.** Tököl, **287.** Tököl–Dunapart, **289.** Üllő–Site 5, **291.** Vác–Szék-hegy, **292.** Váckisújfalu, **293.** Vácrátót–Nagy-rét, **294.** Vecsés–Site 54, **295.** Vecsés–Site 56, **296.** Vecsés–Site 83, **298.** Veresegyház–Álom-hegy, **299.** Veresegyház–Ivacsok, **305.** Zsámbék–Mányi Road

indicated a Makó–Kosihy–Čaka presence on the northern fringes of the Great Hungarian Plain. In his monograph, Kalicz listed three stray finds from County Heves, which he assigned to the Makó–Kosihy–Čaka culture: the fragment of an interior decorated bowl from Heves–Pátag (122), a handled mug from Kömlő (157) and a vessel with asymmetrical handles from Tarnaszárd (260), the latter part of the grave inventory of what was probably an inhumation burial.<sup>120</sup> In 1971, Kalicz collected a few stray finds from a settlement at Boldog–Vasútállomás (44) in the Zagyva Valley. A few years later, in 1974, he uncovered a relatively large settlement section with twelve pits at Tarnabod–Berekalja (259). Kalicz recently published the findings of his research in this region.<sup>121</sup>

Patay’s excavations at Tiszalúc–Sarkadpuszta (278) between 1976 and 1984 marked a major advance. The finds furnished conclusive evidence that the Makó–Kosihy–Čaka and the Nyírség cultures could hardly have been contemporaneous.<sup>122</sup> The full evaluation of the easternmost Makó–Kosihy–Čaka site east of the Tisza, one of the culture’s largest known settlements with its twenty settlement features, has been recently published.<sup>123</sup>

Many new sites of the Makó–Kosihy–Čaka culture were investigated during the salvage excavations preceding the construction of the M3 Motorway across the northern fringes of the Great Hungarian Plain in the 1990s.<sup>124</sup> Andrea Vaday uncovered two burials and a pit, the latter most likely indicating the culture’s settlement, at Kompolt–Kistér (153), a site by the Tarna. Lying no more than 3 km to the east on the opposite bank of the river, János József Szabó excavated six graves of a larger cemetery at Kál–Legelő III (138). A smaller settlement has been investigated at Gelej (114) and Mezőkeresztes–Csincse-tanya (176) and a larger one made up of twelve pits at Oslár–Nyárfaszög (201) in County Borsod. The latter site also yielded four inurned burials. An inurned burial has also been reported from Mezőkövesd–Mocsolyás (178).

A Makó–Kosihy–Čaka settlement was identified at Kömlő (158) in the mid-1990s during the field surveys conducted in the area. The significance of this site lies in the resemblance between the pottery decorated with slender ribs and comparable wares from Kompolt and Mezőkövesd (*Pls 3–4*).

<sup>120</sup> Kalicz (1968) 79–80, Fo. 32, 34, 70, Taf. III. 1, 2, 4.

<sup>121</sup> Kalicz (1998a). Another site is listed at Füzesabony–Pusztaszikszói gyümölcsös (110).

<sup>122</sup> Kalicz (1981) 72–73, Abb. 2–4.

<sup>123</sup> Szathmári (1999a); *idem* (1999b).

<sup>124</sup> Koós (1998); *idem* (1999).



Although additional find assemblages from secure contexts are needed for drawing a reliable distinction between the early and late Makó-Kosihy-Čaka period spanning the Early Bronze Age 1–2, the currently known corpus of finds does allow a few inferences in this respect. The survival of the late Makó culture into the Early Bronze Age 2 on the northern fringes of the Great Hungarian Plain and in the Northern Mountain Range has since long been assumed<sup>125</sup> and more recent finds from northern Hungary seem to confirm the existence of a late Makó-Kosihy-Čaka phase in this region.<sup>126</sup> One important chronological anchor was the horizontal stratigraphy of the Tiszalúc-Sarkadpuszta site, indicating that the Nyírség culture succeeded the Makó-Kosihy-Čaka complex. The excavations in the Polgár area on the left bank of the Tisza too support this chronological sequence.<sup>127</sup> While this chronology seems valid for the above sites, the finds from Oszlár-Nyárfaszög west of the Tisza would suggest that some Makó-Kosihy-Čaka communities survived until the appearance of the Nyírség culture and also came into contact with the latter, as shown by a small handled mug of the Nyírség type recovered from a closed settlement pit of the Makó-Kosihy-Čaka culture at Oszlár.<sup>128</sup>

Beside from newly identified settlements, the number of known burials has also increased, not only in the northern part of the Great Hungarian Plain, but across the entire Makó-Kosihy-Čaka distribution. Thirteen new burials have been added to the already known ones. The grave goods of the inurned cremation burials uncovered at Kál-Legelő represent the classical Makó-Kosihy-Čaka wares. The two cremation burials from Kompolt-Kistér provide important anchors for the culture's internal chronology. The small jug with long curved neck (*Fig. 19. 9*) from the scattered cremation burial (Feature 115) has its counterparts in the Somogyvár-Vinkovci culture, while the western analogies to the amphora decorated with slender ribs (*Fig. 37, Type XV/5*) furnishes additional proof for a late Makó-Kosihy-Čaka horizon in the northern part of the Great Hungarian Plain.<sup>129</sup>

Unfortunately, little is known about the Northern Mountain Range, an important region for identifying the northern boundary of the Makó-Kosihy-Čaka distribution. The stray finds from this region merely indicate that a Makó-Kosihy-Čaka presence seems likely on a handful of hilltop settlements earlier occupied by the Baden culture and subsequently by the Hatvan culture. However, the nature and intensity of the Makó-Kosihy-Čaka occupation on these sites is not known.

Kalicz published a few stray finds from Baglyashegy near Salgótarján (223) and quoted the excavation conducted by Korek and Patay at Salgótarján-Pécskő in 1960.<sup>130</sup> There is no indication of any closer contact between the Baden, the Makó-Kosihy-Čaka and the Hatvan communities successively occupying the site. Rising to a height of 543 m, Mount Pécskő (224) dominates the surrounding land. The Early Bronze Age finds brought to light during the excavation of the settlement on the summit included a few mould fragments; however, none of the finds could be securely associated with any settlement features. A rescue excavation was conducted at Pécskő-puszt (225) in 2003, one of the northern terraces of the Early Bronze Age hilltop settlement, where bronze metallurgy was apparently practiced. The remains of a 13 m by 19 m large north to south oriented house with three rows of posts were uncovered on the strongly eroded terrace. The unstratified finds

<sup>125</sup> *Ecsedy* (1979a) Abb. 9; *Bóna* (1992a) 16, Frühe Bronzezeit I–II.

<sup>126</sup> *Koós* (1998) Abb. 2. *Kalicz* and *Kalicz-Schreiber* have argued for the survival of the late Makó-Kosihy-Čaka culture into the Early Bronze Age 2 and for an early Nagyrév presence in the north, in the areas north-east of the Zagyva: *Kalicz-Schreiber-Kalicz* (1997) Abb. 2; *idem* (1999) Fig. 2. However, there is no conclusive evidence for the Nagyrév distribution in the north.

<sup>127</sup> *Dani* (1999) 68.

<sup>128</sup> *Koós* (1998) Abb. 13.

<sup>129</sup> *Gogáltan* (1999a) Pl. 17. 5, 8.

<sup>130</sup> *Kalicz* (1968) 79, Fo. 29, 31, Taf. III. 6–11, 13–14.



from the area and the structure of the house suggests that the building was constructed during the Early Bronze Age.

Hilltop settlements resembling the sites at Salgótarján have been assumed at Piliny–Várhegy (213)<sup>131</sup> and Ecseg–Várhegy (88).<sup>132</sup> However, evidence for a Makó–Kosihy–Čaka occupation at these sites and the culture's possible late survival is minimal, and virtually nothing is known about possible contact with early Hatvan groups. There is nothing to suggest typological development from the wares of the Makó–Kosihy–Čaka culture to those of the Hatvan culture, even though it seems likely that late Makó–Kosihy–Čaka groups provided the cultural substratum of the Hatvan culture (indicated, for example, by the cremation rite practiced by both cultures).<sup>133</sup> It seems likely that Corded Ware elements infiltrating from the east too contributed to the formation of the Hatvan culture, although the exact process and the finer details of how the culture evolved are still unclear, as are its cultural components and its cradle. The process of change possibly resembled the one in the western Makó–Kosihy–Čaka distribution, where the Chłopice–Veselé groups, in part of eastern ancestry, lived side by side with the late Makó–Kosihy–Čaka communities in the Morava Valley before gradually occupying their territory.

### ***Region III. Central Hungary and the Budapest area***

(Budapest and County Pest; *Fig. 2, Fig. 4*)

Until recently, the archaeological record reflected a sporadic Makó–Kosihy–Čaka presence in the Budapest area and County Pest. Intensive, systematic field surveys and extensive salvage excavations in the Budapest area over the past years have substantially modified this picture following the discovery and investigation of several major sites.<sup>134</sup> Today, one of the perhaps best known settlement areas is made up by the sites in the Budapest area.

Of the sites listed by Kalicz in his monograph, the finds from Budapest–Várhegy have been redated to a later period, to the Nagyrév/Vatya culture.<sup>135</sup> The stray interior decorated bowl from Tököl–Dunapart is now believed as coming from a burial of the early Bell Beaker–Csepel period in view of its decorative technique.<sup>136</sup> The finds from Szentendre–Pannóniatelep too are now regarded as representing the legacy of this group.<sup>137</sup>

The number of Makó–Kosihy–Čaka sites in the Budapest area grew steadily thanks to Rózsa Kalicz-Schreiber's systematic research: the number of known sites rose from nine to eleven, and finally to twelve.<sup>138</sup> Most of these finds are either unpublished or only a small selection has appeared in print, the single exception being the report on the settlement and the cremation burials uncovered at Budapest–Aranyhegyi Road (49).

Several new sites were identified during the systematic field surveys conducted as part of the Hungarian Archaeological Site Survey Project in the 1970s and 1980s on the right Danube bank

<sup>131</sup> Based on the fragments of an interior decorated bowl: *Patay* (1999) 52, Fig. 6. 1.

<sup>132</sup> Cp. *Bóna* (1992a) 11, 21–22. The presence of the Makó–Kosihy–Čaka culture in higher-lying areas east of the Cserhát Mountains is suggested by a stray mug from Eger–Szarvaskő (89) at the foot of the Bükk Mountains.

<sup>133</sup> Cp. *Bóna* (1992a) 21–22; *Tárnoki* (1992).

<sup>134</sup> Compared to the fifty-four sites known in 2001, there is now data on seventy-one sites.

<sup>135</sup> *Kalicz* (1968) 79, Fo. 37.

<sup>136</sup> *Ibidem* 79, Fo. 38; cp. *Kalicz-Schreiber* (1984a); *Bóna* (1992a) 12.

<sup>137</sup> *Kalicz* (1968) 79, Fo. 43; cp. MRT 7, 284, Site 28/27, note 20.

<sup>138</sup> *Schreiber* (1972) 152; *Kalicz-Schreiber* (1975a) 289; *idem* (1976a) 187, Abb. 3; *idem* (1994) Abb. 14.



(Buda and Szentendre districts) and on the river's left bank (Vác and Szob districts).<sup>139</sup> Finds of bowls and scored pots generally indicate settlement sites. The proportion of sites whose material includes interior decorated bowls is fairly low. A few stray finds of interior decorated bowl fragments and other vessels cannot be associated with a specific type of archaeological site.

Two settlements are known from the Ipoly Valley in the region's northern part. Pottery sherds were collected on the hill by the foot of the Börzsöny Mountains at Ipolytölgyes–Szentmárton-dűlő (132) and on an elevation overlooking the eastern fringes of the river's floodplain at Ipolytölgyes–Tszmajor (133). The region's importance is accentuated by the fact that Malé Kosihiy, one of the culture's eponymous sites, lies on the opposite bank of the Ipoly. The settlement site at Perőcsény–Jancsi-hegy (212), a 586 m high mountain, lies a little farther to the north, on the western fringes of the Börzsöny Mountains. During her investigation of the site in 1986, Zsuzsa Miklós found pottery sherds of the Makó–Kosihiy–Čaka culture, although without a context, suggesting that the site had been one of the culture's hilltop settlements.<sup>140</sup>

The finds collected during the field surveys indicate that Makó–Kosihiy–Čaka communities had established settlements along the smaller streams flowing into the Danube in the broader Vác area on the left Danube bank.<sup>141</sup> One of the two pits uncovered at Veresegyház–Ivacsok (299) yielded pots and jugs of the Makó–Kosihiy–Čaka culture, while the other pit contained fragments decorated with zig-zag lines and punctates resembling the ceramic wares of the Bell Beaker–Csepel group. However, the cultural attribution of the material remains uncertain because only a small selection of the finds has been published.<sup>142</sup>

Kalicz excavated two larger pits in 1960 at Domony (83), a settlement located on the eastern slope of the Gödöllő Hills in the Galga Valley. The rich inventory of finds included the culture's first mould. A pit uncovered at nearby Bag–Peres-dűlő (6) too indicated a settlement. Other Makó–Kosihiy–Čaka sites have been identified at Galgamácsa (111–112) and Váckisújfalu (292) during various field surveys.

Very little was known about the more southerly areas of the Pest plainland. An inhumation burial containing a vessel with asymmetrical handles at Budapest–Szentmihályi Road (57) along the Rákos Stream, the stray finds from Budapest–Rákoskeresztúr (59) and the settlement at Budapest–Péceli Road (56) were the only indications of the culture's presence in this area. The site at Budapest–Rákoscsaba, Péceli Road (58) appears to have been a major settlement, at least judging from the forty settlement features of the site lying on the southern bank of the Rákos Stream investigated in 2005 and 2006. Three settlements have been investigated in the Vecsés area south of Budapest on the Pest plainland. Two of these sites, Vecsés–Site 54 (294) and Vecsés–Site 83 (296) were smaller settlements with nine and ten features respectively, while the third site at Vecsés–Ferihegy-dűlő (295) was a larger settlement with thirty pits. The region's most significant find assemblage came to light at Üllő–Site 5 (289): a hoard of moulds, the largest from the Early Bronze Age 1–2 was discovered at the site where twenty-four pits were excavated. The chronology of these sites relative to each other is unclear. The radiocarbon dates for Üllő, 2470–2340 and 2300–2130 BC, suggest that these sites date from a later Makó–Kosihiy–Čaka period.<sup>143</sup>

<sup>139</sup> MRT 7; *Torma* (1991); MRT 9.

<sup>140</sup> A smaller site was identified at Perőcsény–Útelágazás (211) during the area's archaeological survey.

<sup>141</sup> Fót–Konya-Monya (109), Kosd (156), Penc–Hosszúvölgy (207), Vác–Szék-hegy (291), Vácrátót–Nagy-rét (293) and Veresegyház–Álomhegy and Ivacsok (298–299). Interestingly enough, no new sites were registered during the surveys and salvage excavations preceding the construction of the M2 Motorway between Dunakeszi and Vác in the 1990s.

<sup>142</sup> MRT 9, 549, Site 37/2, Pl. 13, 16–17.

<sup>143</sup> *Kővári-Patay* (2005) 124–125.



There is a striking lack of finds from the more southerly areas on the left Danube bank south of Budapest and along the river's palaeochannel (e.g. in the Ócsa area), as well as on the northern fringes of the Kiskunság region during the initial period of the Early Bronze Age. While this apparent lack of occupation might simply indicate a lack of systematic research, it might equally well reflect a genuine absence of settlements in the culture's settlement network.

Scanty traces of occupation have been reported from sites along the watercourses flowing into the Tisza, reflected by the stray finds from Farnos–Kása-dűlő (107) and Tápiószele (266), and a pit uncovered at Tápiószele–Scythian cemetery (267). Similarly, a handful of stray finds from Albertirsa (4) reflects settlement along the Gerje and Perje Streams. A bowl fragment from Cegléd–Réti-dűlő (64) was the single find known from this area until recently: between 2003 and 2006, three smaller settlements were investigated on the outskirts of Cegléd (Cegléd–Sites 4/4, 4/12 and 4/14; [61–63]). Another small settlement was excavated at nearby Abony (Abony–Kisbalaton-dűlő [3]) and a burial, a rare phenomenon in this region, came to light at Abony–33 Alkotás Street (2).

It would seem that Makó–Kosihy–Čaka communities did not settle along the left Danube bank, although a few stray finds from Szentendre Island (Szigetmonostor–Felső-rétek [256]) and Csepel Island<sup>144</sup> indicate the culture's presence in these areas too.

Makó–Kosihy–Čaka occupation in the areas west of the Danube is more intensive, especially south of Szentendre. Two smaller settlements have been reported from Szentendre, both near the Danube (Szentendre–HÉV végállomás [247], and Szentendre–Belterület [246]). The finds collected during the area's field survey reflect a chain of settlements with sites at nearby Szentendre–Papsziget (248), Pomáz (219) and Solymár–Krautgarten-dűlő (226). Several smaller sites are known from the Békásmegyer area on northern outskirts of Budapest,<sup>145</sup> most of which lie close to the Danube. Six pits and a burial lying farther from the settlement were uncovered at the Budapest–Aranyhegyi Road, Mocsáros site (49). The scatter of sites in Budapest<sup>146</sup> contrasts sharply with the settlement concentration in the Budaörs Basin on the south-western outskirts of Budapest and in the city's broader area. The Budaörs Basin played a key role in the contact between the Buda Mountains and the Danube. One of the most promising settlements was investigated at Budapest–Kőérberek (54) by the Kőér and Hosszúréti streams between 2003 and 2005. Some 150 settlement features of the Early Bronze Age 1–3 were investigated in the roughly 220,000 m<sup>2</sup> large excavated area, whose finds could be assigned to the Makó–Kosihy–Čaka and Early Nagyrév cultures. Two other, partially published settlement sites are known from the broader area, one of which perhaps also functioned as a burial site (Budapest–Budaörs Airfield [53], and Vasvári Barracks [55]), alongside the settlement at Budapest–Kamaraerdő (60).<sup>147</sup> Other sites include the settlement at Biatorbágy–Hosszúrétek-dűlő (38) investigated in 1991 and 2003. The burial uncovered some 100 m farther away at Biatorbágy–Tyúkberek (42) was perhaps part of the same settlement. Two other larger settlements known from the area are Biatorbágy–Szarvasugrás (41) and Biatorbágy–Budapark (37). The area's archaeological survey revealed that occupation was continuous in the area extending toward the Zsámbék Basin<sup>148</sup> and in the Zsámbék Basin itself during the Early Bronze Age.<sup>149</sup> A small settlement was reported

<sup>144</sup> Szigetszentmiklós–Vízcsőárok II (257), Tököl (286), Tököl–Dunapart (287).

<sup>145</sup> Budapest–Békásmegyer (50), Budapest–Békásmegyer-BUVÁTI Vízisporttelep (51), Budapest–Királyok Road (52).

<sup>146</sup> Budapest–Tabán (47), Budapest–Dózsa György Street (48).

<sup>147</sup> A settlement was registered on the outskirts of Érd (103) slightly to the south during the area's field survey.

<sup>148</sup> Biatorbágy–Bolha-hegy (36), Biatorbágy–Köves-dűlő (39), Biatorbágy–Öreghegy (40).

<sup>149</sup> Páty–Hegyi-dűlő (206), Perbál–Malom-földek (208), Perbál–Töki határföldek (209), Perbál–Zsidó földek (210), Tök (285), Zsámbék–Mányi Street (305).



from nearby Budakeszi (Budakeszi–Kert and Hársfa Street [45]). In 2006, András Czene excavated a Makó–Kosihy–Čaka settlement with small houses, a building type previously unknown on the culture's sites, and open-air ovens (Budakeszi–Szőlőskert [46]).

One rare settlement type is represented by Alsó Cave on Mount Remetehegy by Nagykovácsi (188) and from the dolina lying some 300 m away (189).

The internal chronology of the region's Makó–Kosihy–Čaka sites and their date relative to the Bell Beaker–Csepel group and the early Nagyrév culture, as well as the cultural connections between these three cultures can only be clarified after the full evaluation of the major Makó–Kosihy–Čaka settlements and of the sites dating from later periods.<sup>150</sup> Evidence for early Makó–Kosihy–Čaka occupation comes from the sites east of the Danube. Two burials/vessel hoards, one made up of eleven vessels (Budapest–Rákosszaba [58]), the other of four vessels (Cegléd–Site 4/4 [61]) both contained pieces resembling Vučedol wares. The burial uncovered at Budapest–Szentmihályi Road (57) can also be assigned here. It must also be borne in mind that the highest number of Early Bronze Age moulds, indicating local metalworking, comes from this region (Domony [83], Üllő [289]).

The areas west of the Danube, where the Makó–Kosihy–Čaka culture was succeeded by the Bell Beaker–Csepel group, are especially important.<sup>151</sup> Aside from the already known typological similarities between their pottery wares,<sup>152</sup> additional evidence for contact between these two cultural complexes can be hoped for from the evaluation of the finds from the area's larger settlements, such as the one at Budapest–Kőérberek. The grave goods of the burials uncovered at Budapest–Aranyhegyi Road reflect connections with the south (Proto-Nagyrév, Somogyvár–Vinkovci) and west (Moravian Corded Ware). Budding contacts with the south and west can be noted already during the Makó–Kosihy–Čaka period; contact with these regions became more dynamic during the Early Bronze Age 2–3. Control over trade routes was no doubt a major consideration in the siting of the settlements beside the strategic fording places over the Danube. The large settlements and their colourful material culture provide uncontested proof for their prominent role.

#### ***Region IV. Transdanubia***

(Counties Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Somogy, Vas, Veszprém; Fig. 2, Fig. 5)

With the exception of southern Transdanubia, the secure cultural attribution and chronological ordering of the Makó–Kosihy–Čaka and Somogyvár–Vinkovci sites is still problematic, not least because of the oft-noted typological resemblances between the pottery wares of the two cultures.<sup>153</sup> The cultural attribution of a site based on the typological traits of a particular pottery ware (jugs, mugs, interior decorated bowls) can be misleading without a knowledge of the find contexts, although very often, even the cultural assignation of closed assemblages is difficult and this problem is even more acute in the case of stray finds. This dilemma is best illustrated by the assemblages containing both Makó–Kosihy–Čaka and Somogyvár–Vinkovci vessels, such as the ones from Budapest–Aranyhegyi Road and Kájárpéc–Pokolfadomb.

<sup>150</sup> Cp. the villages of the Bell Beaker–Csepel group, and the prominent settlement at Budapest–Albertfalva: Endrődi (2002); *idem* (2003a); *idem* (2003b); Endrődi–Reményi (2003).

<sup>151</sup> Kalicz–Schreiber–Kalicz (1999) 86, Fig. 2; Kalicz–Schreiber (2001) 168, Abb. 2. Although the settlement density of the Makó–Kosihy–Čaka culture in the Budapest area was fairly high (60 sites/2000 km<sup>2</sup>), it is far eclipsed by that of the Bell Beaker–Csepel group (60/4–500 km<sup>2</sup>).

<sup>152</sup> Interior decorated bowls have been reported from burials of the Bell Beaker–Csepel group at Tököl: Wosinsky (1904) Pl. 79. 2, Pl. 80. 1–2.

<sup>153</sup> E.g. Ecsedy (1979a).



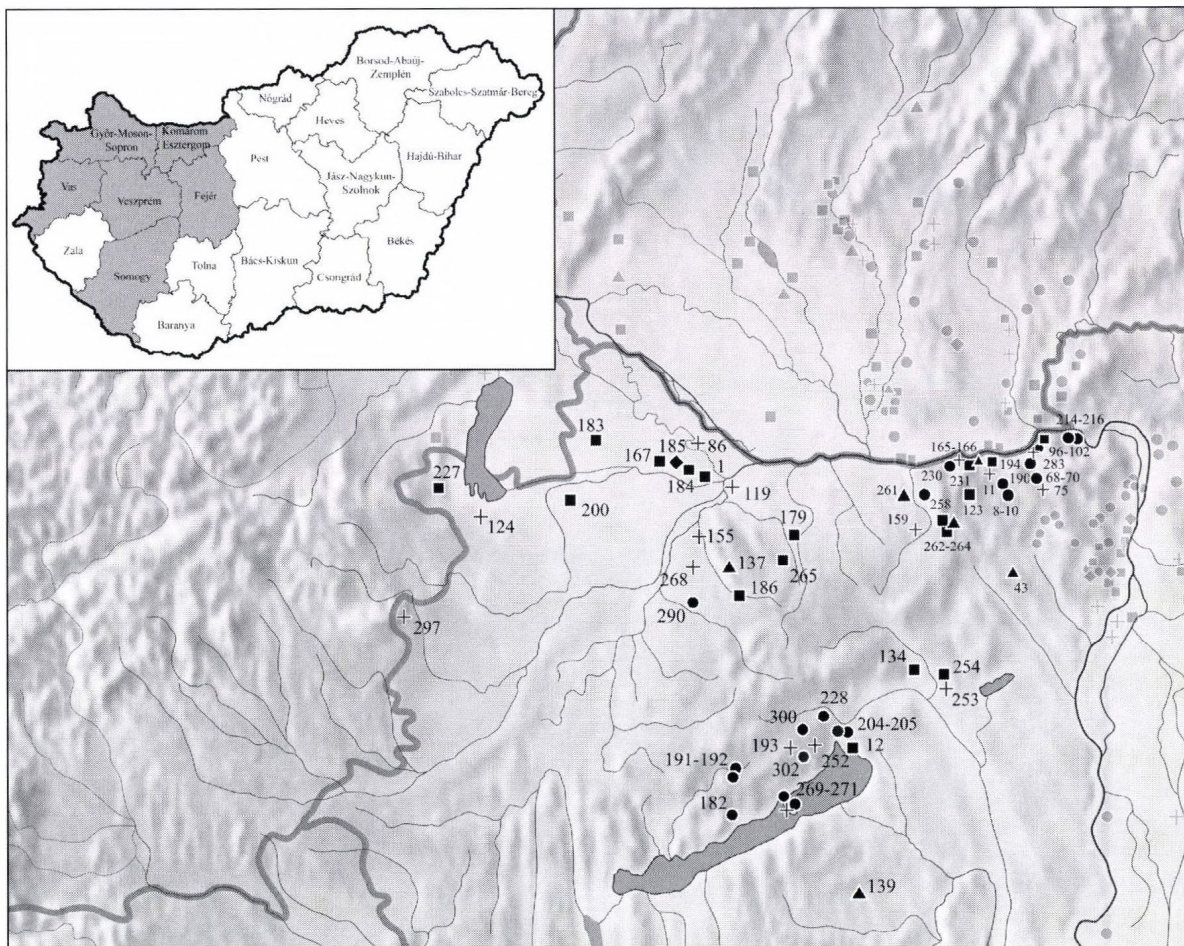


Fig. 5. Distribution of the Makó-Kosihy-Čaka culture

Region IV: Transdanubia

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

1. Abda-Hármasok, 8. Bajna-Kovácsi-hegy-alja, 9. Bajna-Öreglyuk, 10. Bajna-TSz major, 11. Bajót-Péliföldszentkereszt, 12. Balatonkenese-7 Kapuvári Street, 43. Bicske-Szőlőhegy, 68. Csolnok-Annayölgyi Road, 69. Csolnok-Hinter den Gärten, 70. Csolnok-Szedres, 75. Dág-Kiscsévpusztá I, 86. Dunaszentpál-Bolgányi Road gravel pit, 96. Esztergom-Duna-dűlő III, 97. Esztergom, 98. Esztergom-Kistói-földek, 99. Esztergom-Kovácsi, 100. Esztergom-Szentkirály I, 101. Esztergom-Szentgyörgymező-Dunapart, 102. Esztergom-Római Tábor környéke, 119. Győr-Gázgyári homokgödör, 123. Héreg-Fekete Gyémánt lakópark, 124. Hidegség, 134. Iszkaszentgyörgy, 137. Kajárpéc-Pokolfadomb, 139. Kánya, 155. Koroncó-Galambostag, 159. Környe, 165. Lábatlan-Hosszú földek, 166. Lábatlan-Rózsa Ferenc Street, 167. Lébény-Kaszásdomb, 179. Mezőörs, 182. Monoszló-Hegyesetető, 183. Mosonszentjános-Kavicsbánya, 184. Mosonszentmiklós-Gyepföldek-dűlő and Gyártelep, 185. Mosonszentmiklós-Pálmajor, 186. Nagydém-Felsőrépáspusztá, 190. Nagysáp-Esztergomi úti-dűlő, 191. Nagyvázsöny-Baráti-dűlő I, 192. Nagyvázsöny-Baráti-dűlő-Csapás I, 193. Nemesvámos-Kasza-dűlő, 194. Nyergesújfalu-Józsefpusztá, 200. Osló-Faluhelyi-dűlő, 204. Papkeszi-Cigánylap, 205. Papkeszi-Rostás, 214. Pilismarót-Felső Szélesek, 215. Pilismarót-Homoki-szőlők III, 216. Pilismarót-38 Dózsa György Street, 227. Sopronkőhida, 228. Sólly-Rétmelléki-dűlő, 230. Süttő-Tatai úti-dűlő II, 231. Süttő, 252. Szentkirályszabadja, 253. Székesfehérvár-Zámolyi Road, 258. Szomód-Felsőgyep, 261. Tata-Tófarok, 262. Tatabánya-Birkás rét, 263. Tatabánya-Dózsakert, 264. Tatabánya-Réti Road, 265. Tápió-Borbapusztá, 268. Tét-Szarkavár, 269. Tihany-Óvár, 270. Tihany-Rév, 271. Tihany-Rév (Láp), 283. Tokod-Két Nyárfa-dűlő, 290. Vaszar-Szilos, 297. Velem, 300. Veszprém-7 Kossuth Lajos Street, 301. County Veszprém, 302. Veszprémfajsz-Királyhegyesarok



The greater part of Transdanubia up to the Kapos Valley was earlier regarded as part of the Makó–Kosihy–Čaka territory.<sup>154</sup> This picture has been slightly modified and the northern boundary of the Somogyvár–Vinkovci distribution is now drawn at the Sió–Sárvíz line, the implication being that genuine Makó–Kosihy–Čaka assemblages occur north of this line.<sup>155</sup> The currently available evidence does not indicate a Makó–Kosihy–Čaka presence in southern Transdanubia.

Kalicz assigned seven sites to the Makó culture in his 1968 monograph, based on the interior decorated bowl fragments from these sites (Gyulaj–Banyahegy, Lengyel, Kiskánya, Rácegrespuszta, Regöly, Simontornya and Tamási–Szőlőhegy lába).<sup>156</sup> Ecsedy only included the Kiskánya site among the Makó sites,<sup>157</sup> and assigned Gyulaj to the Vučedol–Zók culture, and Simontornya, Regöly and Lengyel to the Somogyvár–Vinkovci culture.<sup>158</sup> The finds only indicate a Late Bronze Age Tumulus culture occupation on the Rácegrespuszta settlement.<sup>159</sup> The finds from the pit-house uncovered at Tamási–Szőlőhegy, resembling the building excavated at Kánya, included the fragment of a marinating vessel with an interior knob and an interior decorated bowl,<sup>160</sup> suggesting that the site can probably be assigned to the Somogyvár–Vinkovci culture. The cultural attribution of the settlement and the burial<sup>161</sup> uncovered at Kánya (MKČ cat. no. 139 and SV cat. no. 103) is dual: the grave can be assigned to the Makó–Kosihy–Čaka culture in view of the urn’s formal parallels, while the settlement finds include both typical Makó wares, such as the small handled pot (e.g. Pl. 34. 1–2) and pottery bearing the typological traits of the southern Transdanubian Somogyvár–Vinkovci wares such as small pot (Pl. 33. 3) and pots (Pl. 34. 5, Pl. 35).<sup>162</sup>

Not one single site which can be unequivocally be assigned to the Makó–Kosihy–Čaka culture has been identified during the past forty years. At the same time, many Somogyvár–Vinkovci sites yielded ceramic types whose typological traits would assign them to the Makó–Kosihy–Čaka repertoire. These include variants of biconical bowls found south of Lake Balaton, such as the pieces from Somogyvár–Kupavárhegy (Pl. 8. 5) and Polány (Pl. 32. 3). The best analogy to one of the bowls from Nagyvejke (Pl. 48. 6) comes from the burials at Budapest–Aranyhegyi Road,<sup>163</sup> assigned to the late Makó–Kosihy–Čaka period, rather than from other Somogyvár assemblages. Although the interior decorated bowl found at Zamárdi (Fig. 61. 1) by Lake Balaton could be assigned to the Makó–Kosihy–Čaka culture in view of its typological traits (rectangular foot and chequerboard pattern), the archaeological record for the area does not support this attribution.<sup>164</sup>

There is no evidence whatsoever for Makó–Kosihy–Čaka occupation on the right Danube bank south of Budapest (the culture’s southernmost site lies on the outskirts of Tököl). At the same time, several smaller Makó–Kosihy–Čaka settlements are known between Apostag (5) and Baja (7), on the

<sup>154</sup> Kalicz (1968) Abb. 3; Kalicz-Schreiber (1975a) Abb. 1; *idem* (1976a) Abb. 1; Bóna (1992a) 16, Frühbronzezeit I.

<sup>155</sup> Kalicz-Schreiber–Kalicz (1997) Abb. 1; *idem* (1999) Fig. 1.

<sup>156</sup> Kalicz (1968) 68, 80, Fo. 60–65, 68.

<sup>157</sup> Owing to the lack of the typical Somogyvár one-handled mugs and jugs.

<sup>158</sup> Ecsedy (1979a) 104, 108.

<sup>159</sup> Csalog (1941) Pl. III. 2–4.

<sup>160</sup> Csalog (1944–45) 194.

<sup>161</sup> Csalog (1941) 9–13, Pls V–VI.

<sup>162</sup> For the cultural attribution of the site, cp. also Ecsedy (1979a) 108; Tóth (2001b) 125–126.

<sup>163</sup> Kalicz-Schreiber (1994) Abb. 3. 1–2.

<sup>164</sup> Kulcsár (1999a) 115, Pl. I. 42, Pl. 6.



opposite bank of the river. The blank spots in the region's Early Bronze Age history will be hopefully filled following the evaluation of the Early Bronze Age sites in the Tolna–Mözs area<sup>165</sup> and the finds brought to light during the salvage excavations along the M6 Motorway.

### *Central Transdanubia*

(Counties Fejér, Komárom-Esztergom and Veszprém; *Fig. 2, Fig. 5*)

Very few assemblages from the Early Bronze Age 1–2 are known from eastern Transdanubia (County Fejér). Kalicz assigned two assemblages to the Makó–Kosihy–Čaka culture from this region: the inurned burial from Bicske–Szőlőhegy and the mugs from Vajta.<sup>166</sup> The Bicske site (43) can be regarded as part of the more intensive Makó–Kosihy–Čaka occupation in the central Hungarian region. The mugs from Vajta, a site lying in the south,<sup>167</sup> echo countless typological features of the similar vessels of the Somogyvár–Vinkovci culture. Comparable mugs, although of a much coarser variety, have been found among the grave goods from Tata–Tófarok (261). It is therefore unclear whether we are dealing with Somogyvár wares on a Makó–Kosihy–Čaka settlement/burial, or a Somogyvár site. The site is generally assigned to the Somogyvár–Vinkovci culture in view of its geographic location. The two-handled “Somogyvár” amphora from Lovasberény mentioned by Bóna is a more complicated issue.<sup>168</sup> It is virtually impossible to determine whether this stray vessel find represents an independent Somogyvár–Vinkovci site or an import/imitation of Somogyvár wares appearing on the northern Transdanubian sites of the Makó–Kosihy–Čaka culture.<sup>169</sup> Bándi also published a few stray finds from Lovasberény (SV cat. no. 128), some of which resemble Makó–Kosihy–Čaka wares,<sup>170</sup> while others exhibit typological traits of the Somogyvár–Vinkovci culture.<sup>171</sup> Seeing that nothing is known about the context of these stray finds, Lovasberény can be assigned to the Makó–Kosihy–Čaka sites on geographical grounds.

The two smaller settlement finds from the Székesfehérvár area mentioned by Bándi in 1982 contributed little towards resolving the distribution boundaries of the two cultures.<sup>172</sup> The two still unpublished assemblages suggested that the boundary between the two partially contemporaneous cultures lay somewhere along the Sárvíz. The finds from Iszkaszentgyörgy (134) on the right bank has more in common with Somogyvár–Vinkovci wares, while the pottery from Székesfehérvár–Zámolyi Road (254) of the left bank of the Sárvíz resembles Makó–Kosihy–Čaka shapes.<sup>173</sup> The finds from Iszkaszentgyörgy include bowl fragments of the Makó–Kosihy–Čaka type<sup>174</sup> and body fragments of pots with cylindrical neck and scored body, as well as fragments of coarse pots typical

<sup>165</sup> SV cat. nos 229–230: *Kiss–Kulcsár* (2001); *Ódor* (2007) 19.

<sup>166</sup> *Kalicz* (1968) 79–80, Fo. 44, Fo. 59.

<sup>167</sup> SV cat. no. 234: *Patay* (1938) 21; *Makkay* (1970) 40/42; *Bándi* (1982) 176, Abb. 11. *Ecsedy* quoted a mug resembling the mugs found at Vajta from Ásotthalom–Borgazdaság: *Ecsedy* (1979a) 108, note 35. For the Ásotthalom mug, cp. *Kürti* (1974) 46, Fig. 32.

<sup>168</sup> SV cat. no. 127: *Bóna* (1965a) 44; *Bondár* (1995) 252.

<sup>169</sup> *Bóna* (1992a) 16, argued for the presence of the Somogyvár–Vinkovci culture in the region. This opinion has been challenged by *Ecsedy* (1979a) 104–105, Abb. 6, Abb. 8–9; *Kalicz–Schreiber–Kalicz* (1997) Abb. 1; *idem* (1999) Fig. 1.

<sup>170</sup> *Bándi* (1982) Abb. 12. 6, 7.

<sup>171</sup> *Ibidem* Abb. 12. 8. For the Környe mug: *Bóna* (1965a) 41, Pl. XII. 4.

<sup>172</sup> *Bándi* (1982) 166, Abb. 3–5.

<sup>173</sup> An Early Bronze Age jug of the Somogyvár (?) type from Székesfehérvár (253) can also be assigned to this category: *Bándi* (1982) 176, Abb. 12. 4.

<sup>174</sup> *Ibidem* Abb. 4. 5.



for both cultures.<sup>175</sup> The rim fragment of the interior decorated bowl with carelessly made decoration has much in common with the late Makó–Kosihy–Čaka bowls in north-eastern Transdanubia,<sup>176</sup> while the fragment of a handled jug/mug with curved neck and conical body bespeaks Somogyvár–Vinkovci influences. Since the find context of the assemblage is not known, the finds from the Iszkaszentgyörgy settlement are here assigned to the late Makó–Kosihy–Čaka period, characterised by intensive cultural impacts from the Somogyvár–Vinkovci culture. A comparison with the finds from Székesfehérvár on the river's opposite bank indicates more similarities than dissimilarities between the two assemblages in terms of the basic pottery forms and the fabric of the vessels (at least judging from the crushed pebble temper of the published fragments). The spatial/chronological relation between the two cultures can only be clarified on the basis of new assemblages from secure contexts.

A similar duality can be noted in central Transdanubia, north of Lake Balaton (County Veszprém).<sup>177</sup> Kalicz assigned the five interior decorated bowls from Nemesvámos (193), the pottery fragments from Szentkirályszabadja (252) and Monoszló–Hegyesetető (182), the interior decorated bowl exhibited at Tihany (270), and a handful of unprovenanced stray finds from County Veszprém (301) to the Makó–Kosihy–Čaka culture.<sup>178</sup> The systematic archaeological field surveys conducted in the county during the 1960s and 1970s<sup>179</sup> enabled the separation of Makó–Kosihy–Čaka and Somogyvár sites in some cases. However, several sites yielded general Early Bronze Age fragments only, such as brushed or scored body sherds, and thus assemblages whose cultural attribution is uncertain have been grouped separately.<sup>180</sup> There are few reliably excavated sites in this area.

The archaeological record indicates that Makó–Kosihy–Čaka communities had settled in the Balaton Uplands and the eastern Balaton Basin. Two settlements are known from this region, each represented by one pit: Balatonkenese–7 Kapuvári Street (12) and Nagydém–Felsőrépáspuszta (186), the latter lying in the Little Hungarian Plain. The interior decorated bowls from Nemesvámos (193) were probably grave goods of symbolic/cremation burials. Additional settlements are indicated by a handful of stray finds from Nagyvázsony–Baráti-dűlő I (191) and Nagyvázsony–Baráti-dűlő–Csapás I (192), as well as fragments of interior decorated bowls found at Papkeszi–Cigánylap

<sup>175</sup> Bándi (1982) Abb. 3. 1, 3–4, 6, 8, Abb. 4. 2, 6, 10.

<sup>176</sup> *Ibidem* Abb. 3. 2, cp. Budapest–Aranyhegyi Road: Kalicz–Schreiber (1994) Abb. 2. 2.

<sup>177</sup> For a recent discussion, cp. Kiss–Kulcsár (2007), with an overview of the palaeoenvironmental evidence.

<sup>178</sup> Kalicz (1968) 69, Fo. 56, 57, 58, Taf. X. 4, 6. The dating of the finds from Mezőlak–Szélmezőmajor is still controversial: Kalicz (1968) 69, Fo. 55; Ilon (2007b).

<sup>179</sup> MRT 1–4. Cp. Torma (1969).

<sup>180</sup> Finds of uncertain cultural attribution from the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci distribution: Badacsonytomaj–Badacsonyörs: MRT 1, 28, Site 2/4; Balatonederics–vált Fekete-kastély: MRT 1, 35, Site 5/1; Balatonfőkajár–Szűcs-földek II: MRT 2, 36, Site 5/7; Balatonfőkajár–Rókalikák I: MRT 2, 37, Site 5/12; Balatonkenese–Akarattya I–Alagút: MRT 2, 52, Site 8/11, Pl. 6. 10; Balatonvilágos–Felső telep I: MRT 2, 60, Site 11/1, Pl. 6. 9, 13, 16, 19; Devecser: MRT 3, 80, Site 14/13; Doba–Kerekdomb: MRT 3, 88, Site 15/10; Dörgicse–Aszó I: MRT 2, 86, Site 18/8; Hegymagas–Bertalan-féle szőlő: MRT 1, 64, Site 16/5, Pl. 7. 2, 4; Királysztistván–Csatári-malom: MRT 2, 116, Site 26/4; Küngös–Deák F. u. vége: MRT 2, 120, Site 28/1; Nagyvázsony–Szentmihályi-dűlő: MRT 2, 139, Site 33/15; Nagyvázsony–Hermannvölgy: MRT 2, 142, Site 33/29; Nemesvámos–Nagykúti-dűlő: MRT 2, 147, Site 34/12; Örvényes–Kukoricaföld: MRT 2, 153, Site 35/3; Papkeszi–Remiz: MRT 2, 170, Site 39/2; Papkeszi–Sári-dűlő: MRT 2, 173, Site 39/18; Pécsely–Ebhegy: MRT 2, 178, Site 40/6; Pécsely–Homokbánya: MRT 2, 178, Site 40/7; Románd–Erdőföldek (Waldackerl): MRT 4, 223, Site 68/10; Sümeg–Vadász-magasles: MRT 3, 223, Site 54/29; Tihany–Diós: MRT 2, 196, Site 45/10; Várpalota–Inota–Mandulás: MRT 2, 214–215, Site 49/15; Várpalota–Inota–Templomhely: MRT 2, 216, Site 49/23; Várpalota–Tófüi-dűlő–Kenyérdomb: MRT 2, 214, Site 49/14; Veszprém–Várhegy: MRT 2, 224, Site 51/1; Veszprém–Gulyadomb: MRT 2, 248, Site 51/59; Zánka–Erdért-üdülő: MRT 1, 191, Site 60/7.



(204), Papkeszi–Rostás (205), Sóly–Rétmelléki-dűlő (228), Tihany–Óvár (269), Tihany–Rév (Láp) (271), Vaszar–Szilos (290), Veszprém–7 Kossuth L. Street (300), Veszprémfajsz–Királyhegysarok (302), and Monoszló–Hegyesetető (182), Szentkirályszabadja (252), Tihany–Rév (270). An unprovenanced small handled pot and a jug from County Veszprém (301) too indicates one of the culture's settlements.

In the light of the above, the north-eastern areas of the Balaton Uplands and the northern part of County Veszprém were definitely part of the Makó–Kosihy–Čaka distribution; in contrast, the record for any Makó–Kosihy–Čaka presence in the county's more westerly areas is uncertain and little is known about the Early Bronze Age occupation.

The north-eastern corner of Transdanubia comprising the north-eastern extension of the Transdanubian Mountain Range and the right Danube bank up to the Danube Bend is currently part of County Komárom-Esztergom. In his 1968 monograph, Kalicz quoted the settlement excavated at Süttő–Vasúti Őrház (now the Lábatlan–Hosszúföldek [165]),<sup>181</sup> whose finds are still unpublished. The Komárom and Esztergom districts in the county's eastern half have been systematically surveyed (MRT 5),<sup>182</sup> as has the broader area of Tata and Tatabánya.

Several settlement concentrations can be noted along the Danube between Pilismarót and Süttő, some of which are indicated by stray finds only (three sites are known in the Pilismarót area [214–216] and two in the Süttő area [230–231]). The Esztergom area appears to have been densely settled: in addition to stray finds from six sites (96–100, 102), eight pits of a larger settlement have been uncovered at Esztergom–Szentgyörgymező (101), a site lying directly on the Danube bank. Gábor Vékony found the remains of a sunken building at Nyergesújfalu–Józsefpuszta (194) in 1969 and a small settlement indicated by three pits has been registered at the Lábatlan–Hosszúföldek site (165). An inurned burial was found in Rózsa Ferenc Street in Lábatlan (166). The opposite bank of the river appears to have been similarly intensively settled, as shown by the finds from Kamenica nad Hronom (335), Mužla–Čenkov (346–347), and Patince (362–363) in Slovakia. The river undoubtedly played a prominent role in the culture's cultural and trade contacts.

Lying farther from the river, stray finds have been reported from Tokod (283), Bajót (11), Nagysáp (190) and Szomód (258), while a cremation burial is known from Tata–Tófarok (261). Three settlements are known in the Tatabánya area, two of which were indicated by a pit (Tatabánya–Réti Road [264] and Tatabánya–Birkás rét [262]), while the third site at Tatabánya–Dózsakert (263) stands out by the richness of its finds: the brief description of the settlement mentions the remains of a timber-framed house, at least six pits and a symbolic burial. A stray vessel has been reported from nearby Környe (159).

The pit uncovered at Héreg (123) reflects the Makó–Kosihy–Čaka settlement in the valleys of the Gerecse Mountains, as do the stray finds and the pit reported from Bajna (8, 10). Evidence for cave occupation comes from Öreglyuk Cave (9) at Bajna. Three smaller settlements were identified during the field surveys in the Csolnok area (68–70) and another site has been reported from nearby Dág (75).

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<sup>181</sup> Kalicz (1968) 79, Fo. 46.

<sup>182</sup> Eleven sites were identified: Csolnok–Annavölgyi Road (68), Csolnok–Hinter den Gärten (69), Csolnok–Szedres (70), Dág–Kiscsévpuszta I (75), Esztergom–Duna-dűlő III (96), Esztergom–Kistói-földek (98), Nagysáp–Esztergomi úti-dűlő (190), Pilismarót–Felső Szélesek (214), Pilismarót–38 Dózsa György Street (216), Szomód–Felsőgyep (258), Tokod–Két Nyárfa-dűlő (283). Some sites were indicated by the fragments of interior decorated bowls: Bajna–Kovácsi-hegy-alja (8), Bajna–TSz major (10), Esztergom–Kovácsi (99), Esztergom–Szentgyörgymező–Dunapart (101), Pilismarót–Homoki-szőlők III (215), Süttő–Tatai úti-dűlő II (230).



Evidence for Early Bronze Age metalworking is scarce from northern Transdanubia. The few finds include the Fajsz type axe from Kisbér and an axe from Süttő.<sup>183</sup>

The cultural attribution of the small handled mugs and jugs found in the Esztergom area (100, 102) and at Környe (159) runs into difficulties. These vessels, mostly stray finds, were earlier assigned to the Somogyvár–Vinkovci culture.<sup>184</sup> They are now regarded as imports or copies of Somogyvár wares in the Makó–Kosihy–Čaka distribution and associated with the cultural changes at the beginning of the Early Bronze Age 2. This interpretation is supported by the burial from Tata–Tófarok and the similar mixed finds assemblages such as the one from Mužla in Slovakia.

#### *Western Transdanubia*

(Counties Győr-Moson-Sopron and Vas; *Fig. 2, Fig. 5*)

County Győr-Moson-Sopron broadly incorporates north-western Transdanubia. Kalicz listed five late Vučedol type stray finds from the Little Hungarian Plain in his 1968 monograph: Győr–Gázgyár, Hidegség, Koroncó–Galambostag, Koroncó–Bábota, Tét–Szarkavár.<sup>185</sup> Of these finds, Ecsedy assigned the fragment of an interior decorated bowl with cross shaped foot from Tét–Szarkavár to the Somogyvár–Vinkovci culture and argued that the other pieces were decorated in the late Vučedol style.<sup>186</sup> In contrast, András Figler agreed with Kalicz that these finds represent Makó–Kosihy–Čaka sites and he enlarged Kalicz's list with eight new sites.<sup>187</sup> However, the general consensus is that the late Vučedol type stray finds from north-western Transdanubia and the stray finds from the fringes of western Transdanubia can be assigned to the late Vučedol period. Finds of this type appear together with the early Somogyvár–Vinkovci culture in County Vas, as at Sé–Malomi-dűlő (SV cat. no. 188) and Ostffyasszonyfa (SV cat. no. 156). In the Little Hungarian Plain, late Vučedol finds of this type can be generally associated with the Early Bronze Age 1 and the Makó–Kosihy–Čaka culture, the single exception being the assemblage from Koroncó–Bábota,<sup>188</sup> which in my opinion does not date from the Early Bronze Age.

The currently known Makó–Kosihy–Čaka sites in north-western Transdanubia lie on the high bluffs along rivers, and beside lakes and marshlands. In addition to settlements indicated by pits (such as the thirteen pits uncovered at Táp–Borbapuszta [265]), sites with houseplans have also been investigated. Outstanding among the latter is the timber-framed, 5 m by 15 m large house with sunken floor uncovered at Abda–Hármasok (1). Most of these sites are either unpublished (Lébény–Kaszás domb [167], Mosonszentjános–Kavicsbánya [183], Osli–Faluhelyi-dűlő [200], Sopronköhida [227]), or only a small selection of the finds has appeared in a brief report (Abda–Hármasok, Mezőörs [179], Táp–Borbapuszta). Two sites have been registered on the outskirts of Mosonszentmiklós. A settlement and a cremation burial have been reported from Pálmajor (185). A large settlement with timber-framed houses and an internal ditch system was investigated at Mosonszentmiklós–Gyepföldek and the neighbouring Gyártelep site (184) in 2000 and 2002. No burials were found at this site. Only a small selection of the finds has been published to date.

<sup>183</sup> *Novotná* (1957) 310, T. I. 1–2.

<sup>184</sup> Esztergom–Római tábor környéke, Esztergom–Szentkirályi földek, Környe: *Bóna* (1965a) 41, Pl. XII. 4, 8–10; *Ecsedy* (1979a) Abb. 6; *Bondár* (1995) 251–252.

<sup>185</sup> *Kalicz* (1968) 79–80, Fo. 47–51.

<sup>186</sup> *Ecsedy* (1979a) 108, Abb. 6.

<sup>187</sup> Thirteen sites are now known: *Figler* (1994) 21, 24–25, Abb. 1.

<sup>188</sup> *Patay* (1940) 6; *Gallus* (1942) 50, Pl. XVII. 8–9, Pl. XVIII. 1–3, 5.



The intact bowl from the Dunaszentpál–Bolgányi Road gravel pit (86) suggests a burial site. Figler mentions cremation burials from the Mosonszentmiklós–Pálmajor site. The low number of burials in this region makes the interpretation of the burials uncovered at Kajárpéc–Pokolfadomb (137) rather difficult. Figler interpreted these graves as burials of the Somogyvár–Vinkovci culture,<sup>189</sup> although the burials can equally well be regarded as Makó–Kosihy–Čaka graves dating from the culture's late period, characterised by grave pottery showing strong affinities with the Somogyvár–Vinkovci culture.<sup>190</sup>

The Somogyvár–Vinkovci finds from the Little Hungarian Plain can be assigned to the culture's late phase within the Early Bronze Age 2.<sup>191</sup> Figler and Bóna employed the same relative chronological framework: in their scheme, the Makó–Kosihy–Čaka culture (Early Bronze Age 1) was succeeded by the Somogyvár–Vinkovci culture (Early Bronze Age 2).<sup>192</sup> The already published finds from this region reflect a striking typological similarity between the pottery wares of the two cultures, most likely an indication of the intensive contacts between the Makó–Kosihy–Čaka population occupying the region and Somogyvár–Vinkovci groups continuously infiltrating the region. Figler has claimed that a distinction can nonetheless be drawn between the wares of the two cultures based on pottery manufacturing techniques. In some cases, the pottery wares of the two cultures can be distinguished by their surface treatment and the tempering agents despite the similarities between vessel forms. The pottery from Györszemere–Tóth tag has been assigned to the Somogyvár–Vinkovci culture in the light of its technical traits,<sup>193</sup> even though an attribution to the Makó–Kosihy–Čaka culture cannot be wholly rejected, for example in the case of pots with notched rim. It seems to me that the currently used criteria are insufficient for unambiguously separating the sites/finds of the two cultures.

The cultural attribution of the axe moulds from Ravazd–Villibald domb (SV cat. no. 177) and Hidegség–Templomdomb (SV cat. no. 75) is uncertain, in part owing to the ambiguities in assigning a site to a particular culture, and in part because the find contexts and the associated finds are often still unpublished. The moulds can probably be assigned to the Somogyvár–Vinkovci period.

Regarding western–south-western Transdanubia, there is no evidence for a Makó–Kosihy–Čaka occupation in County Zala and the record for settlement in County Vas is restricted to a few stray finds. Together with an interior decorated bowl from Szombathely–Körmendi Road, Kalicz assigned two figurines from Velem and one from Sághegy to the Makó–Kosihy–Čaka culture.<sup>194</sup> Ecsedy did not reject their possible attribution to the Somogyvár–Vinkovci culture in view of the stray nature of these finds.<sup>195</sup> Ecsedy's dating seems more acceptable in the case of the bowl from Szombathely. Although rare finds on the sites of this period, the figurines represent types current throughout the Early Bronze Age (*Fig. 38. XXIII/3*).

Finds of the Somogyvár–Vinkovci culture are known from Hungary's westernmost county. The pottery wares from the small settlement investigated at Ostffyasszonyfa (SV cat. no. 156) exhibit the typical traits of both the Somogyvár–Vinkovci and the Makó–Kosihy–Čaka culture, providing important information on the cultural changes in the region lying adjacent to the Little Hungarian

<sup>189</sup> Figler (1994) 22–24, 25, 28, Abb. 10.

<sup>190</sup> Budapest, III–Aranyhegyi Road, Čaka–Kopec, Grave 8, Lábatlan, Tata–Tófarok, Schwechat–Brauerei: Kalicz–Schreiber (1991) 10; *idem* (1994) 40; Kalicz–Schreiber–Kalicz (1997) 335.

<sup>191</sup> Ecsedy (1979a) Abb. 6; Kalicz–Schreiber–Kalicz (1997).

<sup>192</sup> Bóna (1992a) 16; Figler (1994).

<sup>193</sup> Figler (1994) 22.

<sup>194</sup> Kalicz (1968) 80, Fo. 52–54, Taf. X. 5, 7.

<sup>195</sup> Ecsedy (1979a) 108.



Plain.<sup>196</sup> The cultural attribution of the shaft-hole axe from Acsád within the Early Bronze Age 1–2 is similarly uncertain.<sup>197</sup>

## ***Regions V–VII. Slovakia, Austria and Bohemia/Moravia***

### *Cultural background*

The Late Copper Age and Early Bronze Age development in eastern Austria, western–south-western Slovakia and south-eastern Moravia<sup>198</sup> was determined by the cultural trajectories cutting across modern political borders. Following a brief overview of the cultural background, the main complexes of the initial period of the Early Bronze Age are here discussed according to the modern political borders.

The major cultural units of the region's Late Copper Age were the Bošáca group, the Kostolac group and the Jevišovice culture appearing at the end of the Baden period. Very little is known about possible contacts between these groups and the Makó–Kosihy–Čaka culture.<sup>199</sup>

The Bošáca sites show a concentration in the Little and the White Carpathians, in the Upper Nitra/Nyitra and Žitava/Zsitva Valleys, and in the Trnava and Dudváh/Dudvág Valleys,<sup>200</sup> with the areas to the south occupied by the Makó–Kosihy–Čaka culture.<sup>201</sup> It was for a long time an accepted axiom of Bronze Age research that the two groups lived side by side during the Slovakian Late Eneolithic.<sup>202</sup> More recently, however, this axiom has been rejected in the light of new evidence and it is now believed that the two groups succeeded each other.<sup>203</sup> Western and south-western Slovakia was settled by Bošáca and Kostolac groups at the onset of the Late Eneolithic.<sup>204</sup> The depopulation and later occupation of the south-western Slovakian areas between these two groups during this period is sometimes explained by climatic factors.<sup>205</sup> It has also been suggested that an eastern group of the Jevišovice culture occupied these areas, based on the re-attribution of a few western Slovakian sites of the Bošáca group on the right bank of the Váh/Vág and in the Dudváh and Trnava Valleys to the Jevišovice culture.<sup>206</sup>

<sup>196</sup> Ilon (2004); *idem* (2006); *idem* (2007a).

<sup>197</sup> Roska (1957) 7.

<sup>198</sup> Termed “Jung/Späteneolithikum” in Bohemia and Moravia, and “Endeneolithikum” in Austria.

<sup>199</sup> The occurrence of general Early Bronze Age types, such as interior decorated footed bowls and variants of early copper axes, reflects interactions between the cultures already in the early period.

<sup>200</sup> Točík (1961b) 321; *idem* (1963) 14, 22, Abb. 9; Němejcová-Pavúková–Rakovský (1964) Abb. 3.

<sup>201</sup> Vladár (1966) Abb. 1.

<sup>202</sup> Cp. Ecsedy (1979a) Abb. 8. He assumed a Bošáca/Jevišovice-B/Makó–Kosihy–Čaka horizon after the Kostolac period.

<sup>203</sup> Němejcová-Pavúková (1970) 207–219. The finds of the Bošáca and Kosihy–Čaka groups were recovered from separate pits at Jelšovce: Batora (1984) 30. For Nitriansky Hrádok–Zámeček: Němejcová-Pavúková (1995) 29. For sites in Moravia: Pavelčík (1981); *idem* (1993) Mapka 15; for recently identified Bohemian sites: Vokolek–Zápotocký (1990) Obr. 8.

<sup>204</sup> Němejcová-Pavúková (1970) 217–219. Finds of the Kostolac group occur sporadically along the Danube (Iža/Izsa) and east of the Ipel'/Ipoly Valley (Radzovce/Rágyolc). The currently known northernmost site lies at Trenčín/Trencsén in the Váh/Vág Valley (Bondár [1984] 79, Abb. 6), although Slovakian research does not list this site among the sites of the Kostolac group: Němejcová-Pavúková (1995) 29, Abb. 5.

<sup>205</sup> The alternation of wetter and drier periods: Němejcová-Pavúková (1995) 29.

<sup>206</sup> Based on the re-assessment of the Bošáca type finds brought to light at the Jevišovice settlement investigated at Kočín/Köcsény and of the sites to its south: Němejcová-Pavúková (1990) 118; *idem* (1995) 30–31, Abb. 1–4. Cp. also Peška (2001) Abb. 2.



A new perspective in the research on the Jevišovice/Mödling–Zöbing culture can be noted from the 1970s.<sup>207</sup> The greater portion of Moravia was settled by groups of the Jevišovice culture during the Late Eneolithic.<sup>208</sup> One major advance in this field of research was the publication of the finds from earlier excavations (Grešlové Mýto, Jevišovice–Stary Zámek and Vysočany).<sup>209</sup> Anna Medunová-Benešová distinguished three main phases in the Jevišovice sequence: a proto-Jevišovice phase (Grešlové Mýto), an early phase (Vysočany) and a late phase (Jevišovice B).<sup>210</sup> Similar finds from Austria were interpreted as late Baden finds betraying the influence of the Laibach–Vučedol culture.<sup>211</sup> Elisabeth Ruttkay was the first to assign these finds to the Mödling–Zöbing group (“die Begleitkeramik der Laibach–Vučedol-Fußschalen”) succeeding the Baden period,<sup>212</sup> which together with the Moravian Jevišovice culture formed a distinct and independent cultural complex.<sup>213</sup> Three developmental phases are now distinguished for the Jevišovice culture in Lower Austria too: an early (Vor-Jevišovice/Grešlové Mýto/Wachberg), a middle (Vysočany/Spielberg) and a classical/late Jevišovice phase (Jevišovice B/Mödling–Zöbing).<sup>214</sup>

### *Region V. Slovakia (Fig. 2, Fig. 6)*

Based on the findings of earlier research,<sup>215</sup> Bohuslav Novotný labelled the Bohemian and Slovakian assemblages with interior decorated footed bowls “Slavonian culture”,<sup>216</sup> assigning all sites and groups characterised by assemblages of this type to this culture. These included the finds of the Jevišovice and Řivnač cultures, as well as assemblages from south-western Slovakia. Discarding this label, Anton Točík described the burials under the Čaka tumulus and the finds from Malé Kosihy and Nitrianský Hrádok as the Čaka type of the Nagyrév culture.<sup>217</sup> In his view, one could, at the most, speak of the influence of the “Slavonian culture”<sup>218</sup> on the development in Slovakia as reflected by the interior decorated footed bowls, rather than of the culture’s independent horizon.

Točík’s terminological scheme was generally accepted by Slovakian prehistorians in the early 1960s. Jozef Vladár assigned the Čaka settlement that was roughly contemporaneous with the Čaka burials to the Nagyrév culture or, more precisely, to the culture’s “Slovakian facies”, emphasizing

<sup>207</sup> For earlier research: *Hoernes–Menghin* (1925) 770–771.

<sup>208</sup> *Medunová-Benešová* (1993) 191–200, Mapka 15; *Peška* (1998). The radiocarbon measurements gave the following absolute chronological dates: 2890–2770 BC (Brno–Stary Lískovec, Jevišovice B period: *Görsdorf* [1994]).

<sup>209</sup> *Medunová-Benešová* (1972); *idem* (1973); *idem* (1977a); *idem* (1977b); *idem* (1981b); *idem* (1981c).

<sup>210</sup> *Medunová-Benešová* (1977b) 90. Ingrid Burger distinguished two main periods: an early (Grešlové Mýto) and a late phase (Jevišovice-B): *Burger* (1988) 161, Taf. 89.

<sup>211</sup> E.g. by Kurt Willvonseder and Richard Pittioni. For an overview of earlier research: *Ruttkay* (1973). Cp. also *Krenn–Leeb* (1999) 46–53; *idem* (2002a); *idem* (2002b).

<sup>212</sup> *Ruttkay* (1973) 48–49, Karte 2: *Endneolithikum I*.

<sup>213</sup> *Ruttkay* (1981) 74–75; *idem* (1983) 41–44, T. 25–26; *idem* (1985a) 45–47, Taf. 26.

<sup>214</sup> *Krenn–Leeb* (1999) 65–66. Rejecting the Spielberg phase, Ruttkay divided the Jevišovice sequence in Lower Austria into two main phases: an early (Wachberg) and a classical phase (Mödling–Zöbing): *Ruttkay* (1995b) 178. For the distribution of the Jevišovice culture, cp. *Lantschner* (1990); *Ruttkay* (1995b) Abb. 33. The radiocarbon measurements gave the following absolute chronological dates: 2900–2930 BC (Krems–Hundssteig, Meidling im Thale, Kleiner Anzingerberg: *Krenn–Leeb* [2004] 133) and 2815 ± 92 BC (Spielberg–Pielamünd, Neubach–Wachberg: *Ruttkay* [1995b] 186).

<sup>215</sup> Cp. *Childe* (1929) 210; *Eisner* (1933); *Korošec* (1955); *idem* (1959).

<sup>216</sup> *Novotný* (1955).

<sup>217</sup> *Točík* (1960) 23–24; *Točík–Paulík* (1960) 60, 67, 98–99; *Točík* (1961a) 19, 21–24, 36.

<sup>218</sup> Later still, the labels Vučedol culture and “kultura ľubľanských močiarov” were used: *Točík* (1963) 19.



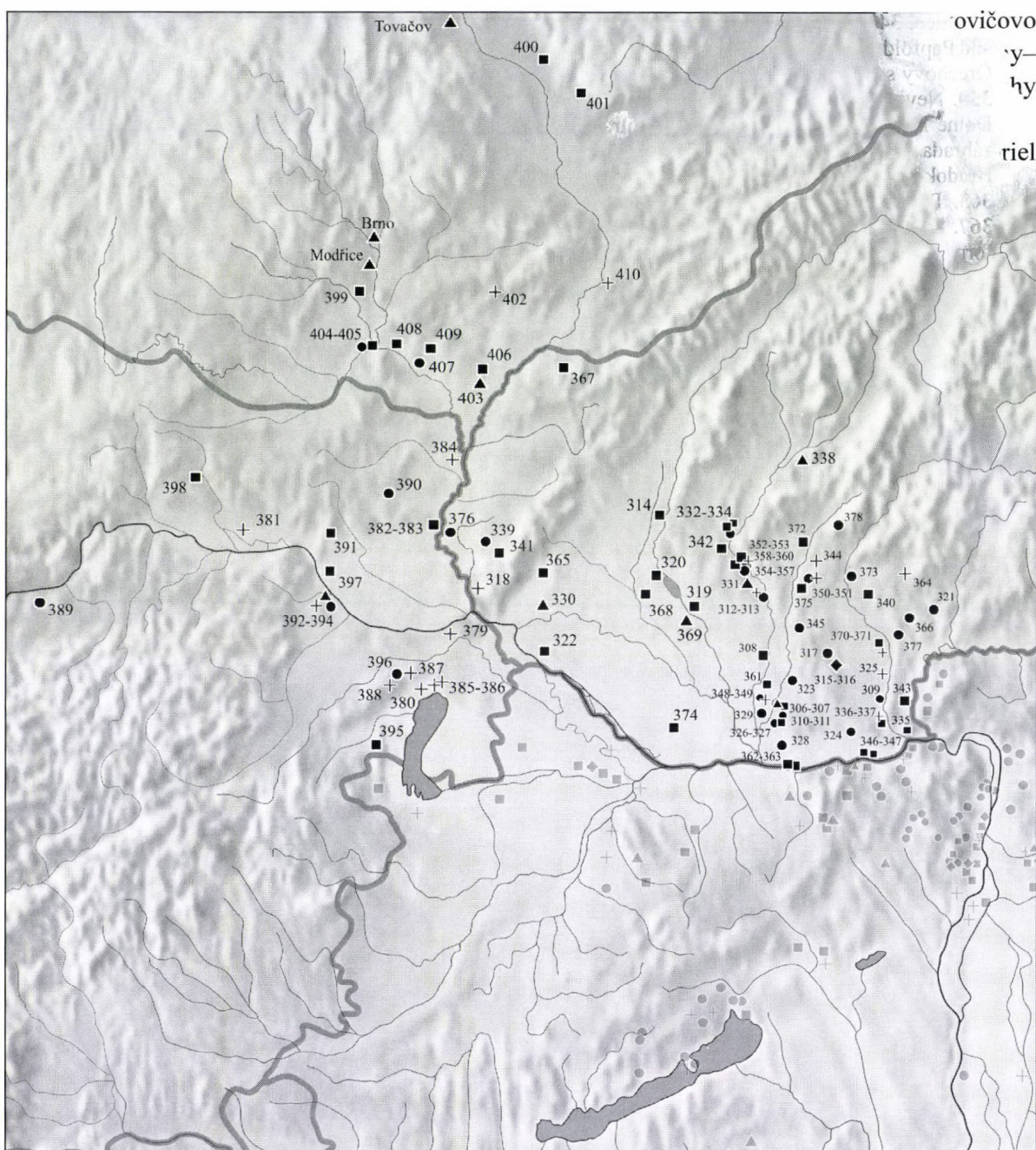


Fig. 6. Distribution of the Makó-Kosihy-Čaka culture

Regions V–VII: Slovakia, Austria, Moravia

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

**Slovakia:** 306. Bajč–Medzi kanálmi, 307. Bajč–Vinohrady, 308. Bánov, 309. Biňa, 310. Bohatá–Klempnerpart, 311. Bohatá–Pálmajer, 312. Branč–Arkuš, 313. Branč–Co-operative courtyard, 314. Bučany–Šl'achtiteľ'ská stanica, 315. Čaka–Diely medzi lúkami, 316. Čaka–Kopeck, 317. Dedinka–Jelení kút, 318. Devínska Nová Ves, 319. Dlhá nad Váhom–Vinohrady, 320. Dolná Streda–Vršky, 321. Dudince, 322. Dunajská Lužná–Nové Košariska–Mohyla VI, 323. Dvory nad Žitavou–Co-operative courtyard, 324. Gbelce–Pieskovňa, 325. Hronovce–Vozokany nad Hronom, 326. Hurbanovo–Bacherov majer, 327. Hurbanovo–sandmine, 328. Chotín–Simítos, 329. Imeľ–Betyárpusztá, 330. Ivanka pri Dunaji, 331. Ivanka pri Nitre, 332. Jelšovce–hospodársky dvor JRD, 333. Jelšovce–Dolné Funduše, 334. Jelšovce–Medzi cestami, 335. Kamenica nad Hronom–Co-operative, 336. Kamenín, 337. Kamenín–Kiskukoricás, 338. Krásno–Kráčiny, 339. Láb–



340. Levice, 341. Lozorno–Široké diely, 342. Lužianky–Kajsa, 343. Malé Kosihy–Törökdomb d., 344. Malé Vozokany–Nové Vozokany, 345. Maňa–Gedra, 346. Mužla–Čenkov–Vilmakert and sad, 347. Mužla–Svätôjurský vnútorný hon, 348. Nesvady–Pethágó, 349. Nesvady–Rókalyuk, Nevidzany–Konopiská, 351. Nevidzany, 352. Nitra–Mikov dvor, 353. Nitra–Mosoda, 354. Nitra–Krškany–Co-operative, 355. Nitra–Dolné Krškany–Plastics factory, 356. Nitra–Dolné Krškany–domu č. 33, 357. Nitra–Dolné Krškany–6 Látečková Street, 358. Nitra–Kynek, 359. Nitriansky hrádok–Vysoký, 360. Nitriansky Hrádok–Zámeček, 361. Nové Zámky, 362. Patince–bank of the Danube, Patince–Teplica, 364. Pečenice–Vtáčnik hill, 365. Pezinok–Lazárna, 366. Santovka–Malinovec, 367. Skalica–Štvrte u Starých šibeníc, 368. Sládkovičovo, 369. Šaľa–Chemické závody, 370. Šarovce–former brick factory, 371. Šarovce–Makóczadomb, 372. Tesárske Mlyňany–Gočol, 373. Tlmače, 374. Veľký Meder–Vámostelek, 375. Vráble–Fidvár, 376. Záhorská Ves–Príbrzí, 377. Zbrojníky–Co-operative, 378. Žitavany–Pohronský Inovec

**Austria:** 379. Bad–Deutsch Altenburg, 380. Breitenbrunn, 381. Eggendorf am Wagram, 382. Grub an der March–Unterhaspel–North, 383. Grub an der March–Unterhaspel–South, 384. Hohenau an der March–Föhrenhügel, 385. Jois, 386. Jois–Teufelsjoch, 387. Kaisersteinbruch–Aufeld, 388. Mannersdorf am Leithagebirge, 389. Matzleinsdorf–Burgstalläcker, 390. Obersulz–Wartberg, 391. Schleimbach–Ziegelei, 392. Schwechat–Bierkeller, 393. Schwechat–Brauerei, 394. Schwechat–Ölraffinerie, 395. Siegendorf, 396. Sommerein–“Kurzen Ellen“, 397. Wien, XXII–Aspern “Weber“, 398. Ziersdorf

**Moravia:** 399. Bratčice area, 400. Hulín, 401. Miškovice, 402. Mištrín, 403. Moravská Nová Ves–Hrušky, 404. Mušov–gravel pit, 405. Mušov–U Sv. Jana, 406. Prušánky, 407. Přitluky–Fraumühle, 408. Strachotín–gravel pit, 409. Velké Pavlovice, 410. Veselí nad Moravou

that the finds differed slightly from the Nagyrév assemblages of Transdanubia.<sup>219</sup> Vladár later assigned the finds previously designated as Nagyrév assemblages to a new group, the Kosihy–Čaka group, which in his system succeeded the Kostolac–Bošáca group at the close of the south-western Slovakian Late Eneolithic.<sup>220</sup> He defined the Kosihy–Čaka group as a regional group of what he termed the “spätäneolitische Kulturkomplex”, an umbrella term for the Nyírség/Makó/Zatín/Bošáca/Jevišovice/Řivnač/Melk cultures. Each regional group of this Late Eneolithic cultural complex had evolved on a local (predominantly late Baden) substratum under cultural impacts of the Vučedol culture and other Balkanic–Anatolian cultures.

In 1966, Vladár published a monographic study on the then known Slovakian sites of the Kosihy–Čaka group, together with a description of the group’s settlements and cemeteries, and an exhaustive typological analysis of the known finds.<sup>221</sup> The number of earlier known sites (Čaka and Malé Kosihy) was supplemented with the assemblages brought to light during the rescue excavations at Nové Zámky and Šaľa, a few stray finds and the material collected during field surveys. He drew the western boundary of the group’s distribution at the Váh/Vág, and presumed the presence of the Bošáca group west of this line. His argument that the Kosihy–Čaka group was an independent cultural entity rather than a local variant of the Zók–Vučedol culture, as were the Makó and the Nyírség–Zatín groups, was based on an analysis of interior decorated bowls, which he believed to have been locally made copies of genuine pieces, rather than imports. Conforming to his earlier view, he interpreted the Kosihy–Čaka group as part of a large Late Eneolithic cultural complex, which was bound by many cultural strands to the Cham group in the west, and the Schneckenberg, Yamnaya and Catacomb cultures in the east.

Vladár’s study was followed by a handful of reports describing new finds and a few general overviews. These included the full publication of the Šaľa burial (complete with the archaeometric

<sup>219</sup> Vladár (1962).

<sup>220</sup> Vladár (1964a). Hungarian research employed a similar label for the description of the find assemblages from south-western Slovakia: “Čaka group of the Zók culture”: Kalicz (1962) 14–15.

<sup>221</sup> Vladár (1966).



analysis of the metal plaque deposited in the grave)<sup>222</sup> and of the material from the Sládk settlement.<sup>223</sup> The next major advance was the publication of the sites investigated at Malé Kosiľ Papfölk and Malé Kosiľ–Törökdomb,<sup>224</sup> followed by the detailed description of the stratigraphy and the finds from Nitrianský Hrádok–Zámeček.<sup>225</sup>

The culture's south-western Slovakian distribution has most recently been discussed by Gab Nevizánsky in his study describing the finds from Kamenín.<sup>226</sup> The number of Makó–Kosiľ–Čaka sites rose by twenty since Vladár published his seminal study in 1966. Nevizánsky noted major regional differences in the culture's settlement density: of the sixty sites listed by him, eleven lay between the Váh/Vág and the Morava in the western distribution, while forty-nine in the roughly similarly large eastern area between the Nitra/Nyitra, Hron/Garam and Ipel'/Ipoly Rivers.

Most of the currently known seventy-three sites in south-western Slovakia<sup>227</sup> lie along the Danube and its tributaries (Ipel', Hron, Žitava, Nitra, Váh, Morava), with a definite concentration in the easterly areas. The eastern boundary of the Makó–Kosiľ–Čaka distribution is marked by a few uncertain stray finds from Dudince (321), Santovka (366) and Pečenice (364) north of the Ipel' Valley,<sup>228</sup> while the northern boundary by a series of smaller sites along the upper reaches of the rivers flowing between the mountain ranges: the stray finds from Žitavany (378) in the Žitava Valley, the uncertain grave goods from Krásno (338) in the Nitra Valley, the settlement pit at Bučany (314) in the Váh Valley and the small settlement of three pits at Skalica (367) in the Morava Valley. The western Slovakian sites (Láb [339], Lozorno [341], Skalica [367], Záhorská Ves [376]) all lie beyond the Little Carpathian Mountains, in the Morava Valley, and can be spatially linked to the Makó–Kosiľ–Čaka distribution in Moravia and Austria.

Smaller site clusters can also be noted, perhaps indeed reflecting the one-time settlement network. Eleven sites are known within a 10 km radius in the Bajč area along the lower reaches of the Nitra and the Žitava: some of these are larger settlements, such as Bajč–Vinohrady (32 pits; 307), Hurbanovo–sand mine (6 pits; 327) and Nové Zámky (12 pits; 361). One site yielded a burial (Bajč–Medzi kanálmi [306]), while only stray finds are known from others (Boháta [310–311], Dvory nad Žitavou [323], Hurbanovo [326], Imel' [329]), and two sites at Nesvady (348–349). A similar cluster of sites has been noted along the upper reaches of the Nitra: seven sites in the Nitra area (352–358) and three in the Jelšovce area (332–334). A more intensive occupation can also be assumed in the Mužla area (346–347) along the Danube.

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<sup>222</sup> Vladár (1967).

<sup>223</sup> Vladár (1969).

<sup>224</sup> Točík (1981b).

<sup>225</sup> Točík (1981a).

<sup>226</sup> Nevizánsky (2001) Abb. 4.

<sup>227</sup> Some twenty-nine new sites have been identified since 1966. The bowl from Bešenov/Zsitvabesenő–Malomgát (*Janšák* [1931] 49, 51, Tab. XXII) was earlier assigned to the Makó–Kosiľ–Čaka culture (*Novotný* [1955] 16; *Vladár* [1966] 255; *Burger* [1980] 29, Fo. 31; *Nevizánsky* [2001] Obr. 4), but is now regarded as representing the Bratislava type bowl of the Boleráz period (Baden Ib). Cp. *Němejcová-Pavúkova* (1981); *Bondár* (2002a).

<sup>228</sup> The cultural attribution of the stray finds of interior decorated bowl to the Makó–Kosiľ–Čaka culture is still controversial, e.g. in the case of the pieces from Gánovce/Gánóc–Hrádok: *Novotný–Kovalčík* (1977) 30; *Soják* (2001) obr. 13. 5; *Žehra/Zsigra–Dreveník*: *Novotný* (1955) Tab. VII. 1; *Vladár* (1970a) 225, Tab. LXXXVII. 3; *Horváthová–Furmánek* (2005) Obr. 8. 5; and *Vítkovce/Vitfalva–Tureň*: *Bátora* (1983a) 192–193, Tab. III. 2; *Horváthová–Furmánek* (2005) Obr. 8. 10.



In many cases, the culture's sites are indicated by fragments of interior decorated bowls.<sup>229</sup> The number of sites reflecting a denser settlement network, identified during field surveys or indicated by stray finds, is quite high.<sup>230</sup>

Most of the investigated twenty-nine sites featured a handful of pits (twenty-five sites with one to six pits). The excavation reports generally mention a few closed pits, the uncertain traces of pits and unstratified finds without a secure context.<sup>231</sup> Six post-holes were uncovered in addition to a pit at Lozorno (341) in eastern Slovakia. The larger settlements at Nové Zámky (361), Tesárske Mlyňany–Gočol (372) and Bajč–Vinohrady (307) were made up of twelve, eighteen and thirty-two pits respectively. A larger settlement of at least forty-three pits was excavated at Mužla–Čenkov (346) on the northern Danube bank. Only a selection of the finds from these settlements has been published and thus the typo-chronological evaluation of these sites remains a task of future research.

Altogether nine graves are known from this region, most of which contained cremation burials,<sup>232</sup> conforming to general funerary practice of the Makó–Kosihiy–Čaka culture. The single inhumation burial has been reported from Ivanka pri Nitre (331). The two graves with stone packing uncovered at Krásno (338) were probably cremation burials too.<sup>233</sup> A settlement and the associated cemetery has only been found at Čaka: the three graves at Čaka–Kopeck (316) lay opposite the settlement at Čaka–Diely medzi lúkami (315) featuring five pits and a larger pit described as a hut on the other side of a stream. The settlement features lay scattered over a roughly 20 hectares large area, conforming to the layout observed on other Makó–Kosihiy–Čaka settlement sites.

Metalworking is indicated by the mould from Vel'ký Meder–Vámostelek (374) and the tuyère from Tesárske Mlyňany–Gočol (372), as well as a stray mould find from Nevidzany (351). The cultural attribution of the latter and the stray finds of Fajsz/Corbasca type axes<sup>234</sup> is uncertain. The two axes from Žitavany and the bronze smithing artefacts found at Tesárske Mlyňany and Nevidzany suggest more intensive metallurgical activity in the Žitava Valley compared to other areas.

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Only a broad outline of the region's Early Bronze Age history can be drawn owing to the modest and only partially published find assemblages. The finds of the early period cannot be identified

<sup>229</sup> Bowls of this type have been found at eight sites: Branč–Arkuš (earlier Lúky–Gergelová) (312), Kamenín (336), Malé Vozokany–Nové Vozokany (344), Nesvady–Pethágó (348), Pečenice–Vtáčnik-hill (364), Šarovce–Makóczadomb (371), Tlmače (373) and Záhorská Ves (376).

<sup>230</sup> Bíňa–Co-operative parking (309), Bohatá–Klempnerpart (310), Bohatá–Pálmajer (313), Branč–Co-operative courtyard (313), Dedinka–Jelení kút (317), Devínska Nová Ves (318), Dudince (321), Dvory nad Žitavou (323), Hronovce–Vozokany nad Hronom (325), Hurbanovo–Bacherov majer (326), Chotín–Simítós (328), Imeľ–Betyárpuszta (329), Jelšovce–Medzi cestami (334), Láb–Pálenice (339), Maňa–Gedra (345), Mužla–Svätojurský vnútorný hon (347), Nesvady–Rókalyuk (349), Nevidzany–Konopiská (350), Nevidzany (351), Nitra–Mosoda (353), Nitra–Dolné Krškany–Co-operative (354), Nitra–Dolné Krškany–Plastics factory (355), Nitra–Dolné Krškany–záhrada domu č. 33 (356), Nitra–Dolné Krškany–Látečková ul. č. 6 (357), Nitra–Kynek (358), Nitriansky Hrádok–Vysoký (359), Santovka–Malinovec (366), Zbrojníky (377), Žitavany–Pohronský Inovec (378).

<sup>231</sup> E.g. Malé Kosihiy–Törökdomb and Papföld (343), Vráble–Fidvár (375), Gbelce (324).

<sup>232</sup> Bajč–Medzi kanálmi (306), Čaka–Kopeck (316), Ivanka pri Dunaji (330), Šaľa (369).

<sup>233</sup> Owing to the uncertain find circumstances, *Benkovský-Pivovárová* (2007) challenged the interpretation of the finds as a grave assemblage.

<sup>234</sup> Five axes of this type are currently known: two are unprovenanced, two were found at Žitavany/Zsitva-kenéz–Na Vrškoch and one at Senica/Szénás: *Novotná* (1957); *idem* (1970) 27–29.



with certainty.<sup>235</sup> The separation of the classical Makó–Kosihy–Čaka horizon is equally difficult because the known find assemblages are coloured by elements which can be linked to other cultural complexes. Two main cultural trajectories and perhaps chronological horizons can be distinguished: one pointing toward the north-west (the Corded Ware complex of Moravia), the other, a later one, toward the south (Somogyvár–Vinkovci–proto-Nagyrév complex).

The few known assemblages do not reflect major differences between the finds from Moravia and western Slovakia. Makó–Kosihy–Čaka elements occur both independently and mixed with Corded Ware elements in Moravia. Contact with the Moravian Corded Ware culture is evidenced by the grave goods of the burials from Šal'a and Čaka in south-western Slovakia.<sup>236</sup> The contact between the two cultures is less obvious from the settlement finds. It has been suggested that smaller Corded Ware groups settled among the mountains of south-western and central Slovakia.

Contact with the south, traditionally linked to the Somogyvár–Vinkovci culture, played an equally important role. Cultural impacts from the south were first suggested in connection with the grave goods of burials, such as the one uncovered at Ivanka pri Nitre, dating from the Makó–Kosihy–Čaka phase equated with the Early Bronze Age 2. The tumulus burial uncovered at Šurany/Nagysurány is sometimes assigned to the tumulus burials of the Somogyvár–Vinkovci culture.<sup>237</sup> This burial lies farther from the tumulus burials along the Danube (Gönyű, Rajka, Neusiedl am See/Nezsider and perhaps Wien–Essling) and there are few anchors for the cultural attribution of the looted central burial and the three child burials without any grave goods. A few vessel fragments and the radiocarbon date of 3960±45 BP nonetheless support a date in the Early Bronze Age 1–2. The brief reports on a few still unpublished sites too mention the occurrence of Somogyvár–Vinkovci elements. The settlement at Mužla–Čenkov (346) is roughly contemporaneous with late Makó–Kosihy–Čaka period along the Danube (Early Bronze Age 2), the Somogyvár–Vinkovci–proto-Nagyrév complex in the south and the Bell Beaker–Csepel group in the Budapest area. The report on the 1992 campaign at Mužla focused on the finds from two pits: in addition to Makó–Kosihy–Čaka elements, the pottery recovered from Pit 70 exhibited the typological traits of Nagyrév and Somogyvár–Vinkovci wares.<sup>238</sup> The few vessel fragments decorated with slender ribs from Kamenín–Kiskukoricás (337) echoed a typical pottery type of the Somogyvár–Vinkovci culture.<sup>239</sup> Two jugs described as “Somogyvár” pieces have been reported from Nitra–Dolné Krškany (357).<sup>240</sup>

The appearance of Chľopice–Veselé groups in the areas west of the Váh<sup>241</sup> probably brought an end to the Makó–Kosihy–Čaka occupation there, while a late survival of Makó–Kosihy–Čaka groups can be assumed east of the river.<sup>242</sup> The patchy archaeological record and the finds reflecting contact with other regions would suggest that the Makó–Kosihy–Čaka sequence comprised two main phases in the south-western Slovakia,<sup>243</sup> and there is also indirect proof for the culture's late survival.

<sup>235</sup> Cp. the new vessels from Nové Zámky–TESCO: *Đuriš* (2005).

<sup>236</sup> Cp. *Bátora* (1989a) 208–209. A broken stone axe of the Corded Ware type has been found at Križovány nad Dudváhom/Vágszentkereszt: *Benkovsky-Pivovárová* (2007).

<sup>237</sup> *Novotná-Paulík* (1989).

<sup>238</sup> *Kuzma* (1993) 74.

<sup>239</sup> *Nevizánsky* (2001) Tab. II.

<sup>240</sup> *Marková* (1995) 93.

<sup>241</sup> *Pavúk* (1981) Abb. 5.

<sup>242</sup> The higher number of sites in this region is perhaps a reflection of this late survival, cp. *Bátora* (1989a) Abb. 1.

<sup>243</sup> *Bátora* (1989a) 208; *Lichardus-Vladár* (1997) 286.



## *Region VI. Austria (Fig. 2, Fig. 6)*

Find assemblages containing interior decorated bowls with cross shaped foot from Lower Austria and the Burgenland were generally associated with the Laibach–Vučedol culture by early Austrian research and interpreted as stray, alien elements appearing during the late Baden period.<sup>244</sup> Novotný quoted eighteen Austrian sites in his overview of the “Slavonian culture”.<sup>245</sup> Ruttkay supplemented the number of known sites yielding footed bowls with a handful of new ones and dated the appearance of this ceramic ware to the close of the Mödling–Zöbing/Jevišovice culture, to the so-called Mödling–Zöbing facies.<sup>246</sup> On the testimony of the stratigraphical sequence observed at the Wien–Aspern settlement,<sup>247</sup> where the finds of the two groups were recovered from two distinct layers, the Mödling–Zöbing/Jevišovice group was succeeded by the Kosihiy–Čaka group in Lower Austria.<sup>248</sup>

The first broad overview of (Makó–)Kosihiy–Čaka type assemblages was presented by Ruttkay,<sup>249</sup> who distinguished three major units of the “Late Eneolithic culture complex” in eastern Austria. Contemporaneous with the Mödling–Zöbing group, the Kosihiy–Čaka group occupied the eastern fringes of Lower Austria,<sup>250</sup> while the Burgenland was settled by the Somogyvár–Vinkovci culture.<sup>251</sup> She assigned five new sites to the number of known (Makó–)Kosihiy–Čaka sites in Lower Austria,<sup>252</sup> which now totalled nine, and drew the boundary of the culture’s distribution slightly more to the west in the Schmida Valley (Eggendorf am Wagram).<sup>253</sup>

Ruttkay also elaborated the typology of the Kosihiy–Čaka/Makó wares from Lower Austria based on the relatively few assemblages known at the time.<sup>254</sup> In her view, several vessel types, such as bowls, interior decorated bowls and flasks, shared affinities with the Somogyvár–Vinkovci culture. Only stray finds and settlement assemblages of the Kosihiy–Čaka/Makó culture were known from this region for a fairly long time. In the early 1990s, two new sites became known (Grub an der March and Siegendorf), and Ruttkay also called attention to a grave from Schwechat–Brauerei (presumably a cremation burial) which had earlier been assigned to the Wieselburg culture, but which she now interpreted as the first scattered cremation burial of the Makó–Kosihiy–Čaka culture from Lower Austria. In her most recent survey of the culture’s sites and finds,<sup>255</sup> she supplemented the known assemblages with a stray find from Jois in the Burgenland and an assemblage containing interior

<sup>244</sup> Kastner (1939); Willvonseder (1939); *idem* (1940); Pittioni (1954) 234.

<sup>245</sup> Novotný (1955) 26–27.

<sup>246</sup> Ruttkay (1973) 39, 45–50, T. 8. 1–7. “Komplex mit verzierten Fusschüsseln”: cp. also Ruttkay (1981) 74; *idem* (1983) 51; *idem* (1985a) 78; *idem* (1995a) 353–354; *idem* (1995b) 178.

<sup>247</sup> Kastner (1939); Ruttkay (1973) 39, 41, T. 1–2; Burger (1980) 32.

<sup>248</sup> Ruttkay (1982) 147.

<sup>249</sup> Ruttkay (1973) 50, Karte 2.

<sup>250</sup> This was based on a handful of sites yielding interior decorated bowls: Deutsch–Altenburg, Hohenau an der March, Schwechat–Ölraffinerie, Wien–Aspern–Weber. These sites had earlier been assigned to the Laibach–Vučedol group/culture. Cp. Ruttkay (1971) 41–42.

<sup>251</sup> Accepting Bóna’s (1965a) finding she assigned the Illmitz/Illmic and Neusiedl am See/Nezsider sites to the Somogyvár–Vinkovci culture: Ruttkay (1973) 50, Karte 2.

<sup>252</sup> Eggendorf am Wagram, Mannersdorf am Leithagebirge, Obersulz, Schleinbach, Sommerein: Ruttkay (1982).

<sup>253</sup> Ruttkay (1982) 144, 147, Abb. 70; *idem* (1983) 44–46, Taf. 27, Taf. 29; *idem* (1985a) 47–49, Taf. 27, Taf. 29.

<sup>254</sup> Ruttkay (1982) 144–147, Abb. 69.

<sup>255</sup> Ruttkay (1995b) 194–199, Abb. 20b, Abb. 31–32.



decorated bowls from Matzleinsdorf (389) near Melk, a site lying far to the west of the culture's distribution.

Two new sites yielding smaller assemblages can be added to the above. One is Kaiserssteinbruch (387) in the Burgenland, the other is Ziersdorf (398) in the north-western part of the culture's Austrian territory. Altogether twenty sites can be assigned to the Makó-Kosihy-Čaka period; the western boundary of the Makó-Kosihy-Čaka distribution is still drawn in the Schmida area<sup>256</sup> because the stray finds from Matzleinsdorf are insufficient for extending the western boundary to the Melk area.

Most of the assemblages from the initial period of the Early Bronze Age in Lower Austria and the Burgenland are stray finds. Not one single extensive settlement has been excavated in the region to date. The perhaps most important Makó-Kosihy-Čaka site in eastern Austria is the settlement at Wien-Aspern-“Weber” (397), where stratigraphical observations could be made. Smaller settlements made up of a handful of pits have been investigated at Sommerein (396), Schwechat-Ölraffinerie (394), Schleimbach-Ziegelei (391), Grub an der March-Unterhaspel (382–383) and Siegendorf (395).

Not one single burial with a secure context is known from the region. The cultural attribution of the known burials is uncertain, reflecting the period's cultural changes. In addition to the grave from Schwechat-Brauerei (393), the crouched inhumation burial from Wien 21-Leopoldau must be mentioned here.<sup>257</sup>

Ruttkay assigned the stray find of a Fajsz type axe from Hauskirchen in the Zaya Valley<sup>258</sup> to the Mödling-Zöbing group.<sup>259</sup> The cultural attribution of the axe is uncertain owing to the few metal finds from the region.

The interior decorated footed bowls, mostly stray finds, can be broadly assigned to this period. However, their precise cultural attribution is uncertain owing to the lack of associated finds and the lack of a find context.<sup>260</sup>

Bowls with a solid cross shaped foot (Ruttkay's Types 1–2: Melk-Spielberg, Mödling-Hirschkogel) can be assigned to the Mödling-Zöbing/Jevišovice culture and the Laibach (Ig I)–late Vučedol period.<sup>261</sup> Comparable bowls from south-western Moravia can be dated to the same period because they generally occur on settlements of the Jevišovice B culture.<sup>262</sup> These bowls indicate that contact with the Vučedol II/Ig I/Ljubljana complex in the south had been established prior the appearance of the Makó-Kosihy-Čaka culture in the west.

The cultural attribution of the handful of bowls with solid cross shaped foot of this type from the Burgenland found at Deutschkreutz I–III, Illmitz, Jois, Mörbisch and Schützen am Gebirge is uncertain. They can be assigned to the Laibach-Sarvaš type bowls in the generally accepted scheme proposed by Burger in 1980, which Ruttkay too correlated with the Jevišovice/Mödling-Zöbing-

<sup>256</sup> The following sites are also generally listed among the sites of the Vučedol–Laibach period: Horitschon/Haracsony–Kurzknollig in the Burgenland (stray finds), Mörbisch, Wien XIII–Geimendeberg: *Pittioni* (1954) Abb. 163–164; Deutschkreutz/Sopronkeresztúr–Schottergrube in the Burgenland, alleged inhumation burials: *Ohrenberger* (1959).

<sup>257</sup> *Pittioni* (1954) Abb. 166; Cp. *Moucha* (1981) 115, note 9; *Hahnel* (1992) 86, note 32; *Ruttkay* (1995b) 196.

<sup>258</sup> *Huysza* (1990) 181, Abb. 184; *Ruttkay* (1995b) 190, Abb. 30. 18.

<sup>259</sup> Based on the analogies from Brno-Lišen and Fajsz to the chisel found at Mödling-Hirschkogel: *Ruttkay* (1995b) 189–190, Abb. 30. 17.

<sup>260</sup> E.g. Au am Leithagebirge, Baden-Raucheneck, Obersulz-Breitern, Wien-Aspern, Binder in Lower Austria and in the Burgenland: *Ruttkay* (1995a) 354.

<sup>261</sup> *Ruttkay* (1990) 103.

<sup>262</sup> *Medunová-Benešová* (1993) 191–200.



Laibach I (Ig I)/late Vučedol period.<sup>263</sup> On the testimony of the finds from Neusiedl am See,<sup>264</sup> these finds can be linked to the Neusiedl facies/ Vučedol II/Ig I groups.

The interior decorated bowls with hollow rectangular foot of Ruttkay's Type 3 (Čaka type) from Schwechat–Ölraffinerie (394), Sommerein (396) and Grub an der March–Unterhaspel–South (383) can be assigned to the Makó–Kosihy–Čaka culture. Bowls with round pedestals are rare finds in Lower Austria, known only from Schwechat–Bierkeller (392) and Ziersdorf (398). Bowls of this type (Burger's Baranya type), occurring more frequently in Transdanubia and south of the Drava, can be linked to the Transdanubian distribution of the Somogyvár–Vinkovci culture. Small handled mugs of the Somogyvár–Vinkovci type have also been found at the above two sites. At Ziersdorf, the mug was found alongside a bowl decorated with a crescentic rib recalling a typical Makó–Kosihy–Čaka ornamentation. Similarly to assemblages from northern Transdanubia, these finds reflect the close cultural ties between the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures.

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Prehistorians working in neighbouring countries have had little concern for the assessment of the Early Bronze Age sites in Austria. Moravian archaeologists assume the presence of the Mödling–Zöbing/Jevišovice culture and the Makó–Kosihy–Čaka culture in Lower Austria and Moravia during the Moravian “Jungäneolithikum”.<sup>265</sup> Ecsedy did not assign the Lower Austrian assemblages to the Makó–Kosihy–Čaka culture, suggesting that Lower Austria and Burgenland was settled by Mödling–Zöbing/Jevišovice-B groups during the post-Vučedol I period, while the post-Vučedol II period saw the arrival of early Bell Beaker groups in Lower Austria and of late Somogyvár–Vinkovci groups in the southern Burgenland.<sup>266</sup> Kalicz and Kalicz-Schreiber presumed a Makó–Kosihy–Čaka presence on the eastern fringes of Lower Austria during the Early Bronze Age 1, and believed that the Somogyvár–Vinkovci sequence in the Burgenland could be divided into two phases spanning the Early Bronze Age 1–2.<sup>267</sup> Bóna drew the western boundary of the Makó–Kosihy–Čaka distribution at the Morava, the Danube and Lake Neusiedl based on the record from Moravia and the new findings of Austrian research.<sup>268</sup>

There is a general consensus that the Austrian “Endneolithikum” can be divided into two main periods until the appearance of the Bell Beaker culture: an earlier one (I: Jevišovice/Mödling–Zöbing–Laibach (Ig I)/Late Vučedol period) and a later one (II: Kosihy–Čaka/Makó–Neusiedl am See type/post-Vučedol period).<sup>269</sup> In her re-assessment of the burials from Neusiedl am See, Ruttkay modified this framework with regard to the south-east Austrian region.<sup>270</sup> The radiocarbon dates of 2820–2660 BC for the tumulus burial,<sup>271</sup> which had earlier been associated with the Somogyvár–Vinkovci culture, suggested that the “Neusiedl Fazies” could be synchronised with Jevišovice/Mödling–Zöbing/Vučedol I/Ig I and that this phase was followed by the Kosihy–Čaka/Makó period

<sup>263</sup> Ruttkay (1995a) 354.

<sup>264</sup> Ruttkay (2002); *idem* (2003).

<sup>265</sup> Peška (1989) 198, Abb. 1; *idem* (2001) Abb. 1–2.

<sup>266</sup> Ecsedy (1979a) Abb. 7–9.

<sup>267</sup> Kalicz (1982) Abb. 5–7; Kalicz-Schreiber (1982) Abb. 2–3; Kalicz-Schreiber–Kalicz (1997) Abb. 1–2; *idem* (1999).

<sup>268</sup> Bóna (1992a) 16, Frühe Bronzezeit I.

<sup>269</sup> Lower Austria: II.1. Kosihy–Čaka/Makó group, II.2. Corded Ware/Herzogenburg group: Ruttkay (1995a) 354; *idem* (1995b) 178; *idem* (2002).

<sup>270</sup> Ruttkay (2002); *idem* (2003).

<sup>271</sup> Stadler (2002).



during which the first Somogyvár–Vinkovci elements made their appearance. The new absolute chronological data certainly call for a re-evaluation of the archaeological record from Burgenland and western Hungary.

### *Region VII. Moravia (Fig. 2, Fig. 6)*

Five sites in all were assigned to the Makó–Kosihy–Čaka culture in the early 1980s in Moravia.<sup>272</sup> This number has since grown to twelve.<sup>273</sup> The Makó–Kosihy–Čaka culture does not seem to have played a prominent role in Moravia seeing that the currently known sites yielded mixed assemblages typical for fringe and contact zones.

Aside from the stray finds,<sup>274</sup> settlements are generally indicated by a few pits: one pit at Hulín (400), Miškovice (401) and Mušov (405), and four pits at Velké Pavlovice (409). The 8.1 m by 7 m large, almost rectangular building uncovered on the Aunjetitz settlement at Bratčice (399) was assigned to the Makó–Kosihy–Čaka period by Medunová-Benešová owing to its resemblance to the “pit-house” uncovered at Nové Zámky.<sup>275</sup> Although Makó–Kosihy–Čaka pottery sherds were brought to light during the excavation, this feature yielded few finds, among which there were also Bell Beaker sherds. Even though contact between the Makó–Kosihy–Čaka culture and the Bell Beaker culture cannot be excluded, the chronological position and the cultural attribution of the building is uncertain, as is that of the two smaller settlements investigated at Mušov (405) and at Strachotín (408), lying farther to the east.<sup>276</sup> A pot and a bowl representing general Early Bronze Age types were recovered from a pit at Mušov.<sup>277</sup> Four rectangular, house-like features without any associated post-holes were uncovered at Strachotín, which yielded pottery whose analogies can equally well be quoted from the late Makó–Kosihy–Čaka, the late Corded Ware and the early Bell Beaker cultures.<sup>278</sup>

Very few graves are known, and the few burials all reflect the cultural interaction characterising the region. A scattered cremation burial uncovered at Moravská Nová Ves–Hrušky (403) has been assigned to the Makó–Kosihy–Čaka culture. The grave goods of the two burials of the Moravian Corded Ware culture from Modřice<sup>279</sup> and Tovačov<sup>280</sup> both included an interior decorated footed bowl. The fragment of a bowl of this type has also been reported from the Bell Beaker cemetery at Brno–Holásky.<sup>281</sup> Contact with the Moravian Corded Ware culture is thus most clearly evidenced by the burials, both as regards the grave goods and the cremation rite.<sup>282</sup>

<sup>272</sup> Bratčice–Sandmine, Hulín, Miškovice, Mušov, Přitluky–Fraumühle: Medunová-Benešová (1981a).

<sup>273</sup> Stuchlíková–Stuchlík (1989) 187, Abb. 2. 1–4; Peška (1989) 193; Peška–Rakovský (1990); Stuchlíková–Stuchlík (1996) Obr. 45; Peška (1999); Šebela (1999a); Peška (2001) 139.

<sup>274</sup> Mištrín (402), Mušov (404), Přitluky–Fraumühle (407), Veselí nad Moravou (410).

<sup>275</sup> Medunová-Benešová (1981a) 100, Abb. 2. 8–18, Abb. 4. b.

<sup>276</sup> Peška–Rakovský (1992).

<sup>277</sup> Šebela (1999a) interpreted the assemblage as the grave goods of a burial.

<sup>278</sup> Lubomír Šebela suggested that these sites represent a Makó–Kosihy–Čaka culture-like find horizon between the Jevišovice and the proto-Aunjetitz period, which he labelled the Strachotín–Mušov type: Šebela (1999a) 227, Abb. 7.

<sup>279</sup> Modřice, Feature 7: Matějčková (1999).

<sup>280</sup> Tovačov I, Grave 2: Šebela (1993) Fig. 126. 6; *idem* (1999b) Pl. 110. 1.

<sup>281</sup> Brno–Holásky II, Grave 61/38: Dvořák (1992) 15, Taf. 26/B3.

<sup>282</sup> Šebela (1981a) 186; Langová (2004); Benkovský-Pivovárová (2007). For the interaction zone between more distant regions and the assumed network of contacts in the Carpathian Basin reconstructed from the distribution of handled jugs (Letonice and Dřevohostice types), cp. Buchvaldek (1981a); Moucha (1981); Šebela (1981b); Peška (1989) 196–197; Šebela (1993); Bertemes–Heyd (1996).



The appearance of Makó–Kosihy–Čaka communities in eastern Austria and south-eastern Moravia can be put at the close of the Jevišovice/Mödling–Zöbing period and the ensuing Moravian “Jungäneolithikum”.<sup>283</sup> Although the two cultural complexes complement each other in terms of their distribution, their full contemporaneity yet remains to be proven. The Jevišovice culture most likely established contact with the Makó–Kosihy–Čaka culture and perhaps even had an impact on its formation,<sup>284</sup> a possibility reflected by the similarity between the pots and amphoras of the two cultures and the presence of interior decorated footed bowls (although of different varieties)<sup>285</sup> in their ceramic repertoire.

Contact between the Makó–Kosihy–Čaka culture and the neighbouring Moravian Corded Ware culture,<sup>286</sup> the Bell Beaker culture and the proto-Aunjetitz culture can be demonstrated during the Moravian “Spätäneolithikum” too.<sup>287</sup> The archaeological evidence suggests that the Makó–Kosihy–Čaka presence was more intensive than previously, although it is often difficult to distinguish the Makó–Kosihy–Čaka culture from other contemporary cultures. It would appear that a less densely settled contact zone can be assumed along the Morava and its tributaries.<sup>288</sup>

The earlier Makó–Kosihy–Čaka territory in Moravia was occupied by the Bell Beaker culture during the late Makó–Kosihy–Čaka period (Early Bronze Age 2) as shown by the site at Moravska Nova Veš. The Kosihy–Čaka groups were pushed back into south-western Slovakia, where they mixed with southern elements. Concurrently, the first Chłopice–Veselé groups appeared in the territory between the two on the left bank of the Morava. Contact with the Chłopice–Veselé group is indicated by small handled vessels of a type uncommon among Makó–Kosihy–Čaka wares, recovered from the culture’s burials.<sup>289</sup> These vessel and a few typological features, such as thickened vessel rims, are usually interpreted as reflecting contact between the two cultures.<sup>290</sup> The former territory of the Kosihy–Čaka group in south-western Slovakia was first occupied by the Chłopice–Veselé culture and then by the Nitra culture at the close of the Early Bronze Age 2.

<sup>283</sup> Peška (2001).

<sup>284</sup> Medunová-Benešová (1981a) 112.

<sup>285</sup> Jevišovice culture: Novotný (1955); Neustupný (1966) 95; Medunová-Benešová (1993) 191–200. It has been suggested that these elements were mediated to the Cham group of southern Germany by the Jevišovice culture: Burger (1988).

<sup>286</sup> “Fundgruppe IIIa/IIIb” (2600/2500–2400–2300 BC): Furholt (2003); Benkovský-Pivovářová (2007).

<sup>287</sup> Peška (1989) 196, 198; Stuchlíková–Stuchlík (1989) 187; Peška–Šebela (1992).

<sup>288</sup> For a re-interpretation of the concept of “culture” in this region, cp. Bertemes–Heyd (2002).

<sup>289</sup> Sudomeřice II, Grave 4: Peška–Šebela (1992) 132, Abb. 2. 7. Cp. Malé Kosihy–Törökdomb: Vladár (1966) Abb. 12. 6.

<sup>290</sup> This possibility was not considered earlier, cp. Kalicz–Schreiber (1991) Fig. 8; Bóna (1992a) 16; Ecseidy (1994a) Fig. 3; *idem* (1995a) Fig. 3; Kalicz–Schreiber–Kalicz (1997) Abb. 2; *idem* (1999) Fig. 2. The possible role of the Makó–Kosihy–Čaka in the emergence of the proto-Aunjetitz culture is not clear.



## The settlements of the Makó–Kosihy–Čaka culture

Our knowledge of the culture's settlement barely increased for many decades. The Makó–Kosihy–Čaka communities were envisioned as a mobile population engaged in herding, whose settlements were made up of a few pits or clusters of pits.<sup>291</sup> This picture has been modified to some extent following the large-scale salvage excavations conducted over extensive areas (Figs 7–8).<sup>292</sup>

### *Settlement features of the Makó–Kosihy–Čaka settlements*

#### *Pits*

The most typical features on Makó–Kosihy–Čaka settlements are the round or oval cylindrical pits with a diameter of 80–250 m and, more rarely, beehive shaped, usually shallow pits (16–120 cm). Most pits had perhaps originally been used for extracting clay or for storing food, at least judging from the scarcity of finds in their fill. Not one single beehive shaped or other pit with a burnt interior, evidently used for storing crops, has yet been reported. Most of these pits were secondarily re-used as refuse pits. Traces of burning indicated by ash or a burnt level, either intentional or accidental, have been observed in some of these features.<sup>293</sup> Pits with a homogenous fill indicating a single phase of infilling and pits with a stratified or mixed fill reflecting separate phases of infilling have both been found.<sup>294</sup>

#### *Animal remains in pits*

Pits containing a substantial number of animal bones stand out from among the usual refuse pits. One of the pits uncovered at the Balatonkenese–7 Kapuvári Street site (12) yielded 519 animal bones, no doubt the remains of the animals consumed by settlement's occupants. Pit 6 of the Csongrád–Sertéstelep (72) settlement contained 737 animal bones, deposited over a longer period of time. Seven other pits of the settlement yielded the bones discarded after individual meals. The animal bones formed several layers in one pit of the Berettyóújfalu–Nagy-Bócs settlement (21) (Feature 82/236) and one of the pits at Üllő (Pit 4035).<sup>295</sup> Pit 5600 of the Üllő settlement differed from the above features: lying in the 78 cm deep pit with a diameter of 240 cm were the bodies of at least fourteen cattle deposited without the head and limbs in several layers, apparently in a form ready for consumption.<sup>296</sup>

The intact or almost intact dog skeletons found in some pits do not seem to have been special deposits. It seems more likely that the community's herding dogs had been simply buried in these pits.<sup>297</sup> The almost complete skeleton of a newborn lamb found in Pit 6 of the Csongrád–Sertéstelep

<sup>291</sup> Vladár (1966) 254–266; Kalicz (1968) 80–81; *idem* (1984a) 94–95; Machnik (1991a) 62–64; Csányi (1996); Figler (1996a) 9; Kalicz (1998a); Koós (1998); *idem* (1999); Szathmári (1999a); *idem* (1999b).

<sup>292</sup> E.g. Tóth (2001a); *idem* (2001b); *idem* (2004); Dani (2005c); Kővári–Patay (2005).

<sup>293</sup> E.g. Biatorbágy–Budapark (37); Üllő–Site 5, Pit 3: Kővári–Patay (2005) 101.

<sup>294</sup> A stratified fill was noted in several pits of the Berettyóújfalu–Nagy-Bócs settlement: Dani *et al.* (2006) 9, Fig. 6, and in Pit 9 of the Üllő–Site 5 settlement: Kővári–Patay (2005).

<sup>295</sup> Kővári–Patay (2005) 87, 104, Fig. 24. 2, Fig. 32. 1–7, 9. A pit from Kunadacs–Köztemető (160) is said to have contained cattle, sheep and dog remains.

<sup>296</sup> Kővári–Patay (2005) 104, Fig. 24. 2, Fig. 26. 1. A similar pattern of deposition has been noted on other Early Bronze Age sites too, e.g. at Budapest–Soroksár, and on Late Bronze Age sites: Vörös (2002).

<sup>297</sup> Several dog skeletons were recovered from three of the nine pits (Pits 4, 6 and B11) at Csongrád–Sertéstelep (72) and from Well 455/1148 at Berettyóújfalu–Nagy-Bócs (21).



site and the pig skeleton in Pit B11 can perhaps be seen as an animal sacrifice, even though the find circumstances do not clearly indicate a sacrificial deposit.

#### Possible ritual pits/wells

The fill and the finds of certain pits/wells occasionally raise the possibility that these features had been used during rituals.

The perhaps most obvious example of a ritual involving a sacrifice in a pit comes from Feature 133 of the Tiszapüspöki–Karancs, Háromág settlement (280). Some forty vessels had been stacked in the *ca.* 70 cm deep, downward narrowing pit, whose volume was estimated at 0.48 m<sup>3</sup>. The vessels, animal bones and a broken stone axe were deposited in four layers. The special function of the pit is indicated by the separate deposits, as well as by the fact that not one single intact vessel was found, suggesting that they had been intentionally broken before being placed in the pit. The poor firing of the vessels too suggests a special, non-domestic function and use.<sup>298</sup>

The repeated sacrificial use was suggested for a 2.3 m deep pit at Berettyóújfalu–Nagy-Bócs (Feature 1982/4018) and the wells, in part based on their stratified fill.<sup>299</sup> The upper layer of the fill of a feature which had originally been dug for a well (Feature 455/1148) contained several dog skeletons, while a deposit made up of an aurochs horn and broken vessels under which lay an intact handled jug was found at a depth of *ca.* 3 m. Another well (Feature 887/2055) too had a stratified fill comprising five layers of burnt animal bones and vessels, again suggesting a secondary ritual use.

The less uncontroversial examples include a pit uncovered beside Grave 1 at Kompolt–Kistér. The stratified fill containing stone rubble, a broken rectangular stone, animal bones and many pottery sherds suggested that the pit had perhaps been used for ritual activities.<sup>300</sup> Batora believed that one of the pits excavated at Jelšovce containing a relatively high number of split animal bones and other finds had perhaps been used during rituals.<sup>301</sup> Features used for ritual/sacrificial purposes have been reported from the Budapest–Kőérberek site too.<sup>302</sup>

One rare phenomenon is the burial of a 2–3 years old child found in the upper part of the fill of a pit (Feature 14) uncovered at Csongrád–Sertéstelep. Katalin Tóth suggested that the pit had perhaps been used in rituals.<sup>303</sup>

#### Deposits of intact artefacts

Several pits contained deposits of intact vessels, suggesting the pit's ritual use. However, a typical vessel deposit has not yet been reported from the culture's territory.

The interpretation of stray finds of intact vessels is problematic because it is unclear whether they had been grave goods or settlement finds (*Fig. 17*). An interpretation of these finds as the grave goods of a symbolic burial has been suggested for the three (or perhaps five) interior decorated footed bowls found at Nemesvámos (193).

Pit 8/59 of the eponymous site at Čaka–Diely medzi lúkami (315), interpreted as a pit-house, yielded some seven or eight restorable vessels. One pit of the Üllő–Site 5 (Feature 3627) contained four bowls and two jugs placed by the side of the pit and a heap of animal bones in its centre. One of

<sup>298</sup> Csányi–Cseh–Tárnoki (2002) 48–50, Figs 2–5.

<sup>299</sup> Dani *et al.* (2006). A similar well with a stratified fill has been uncovered on the Nyírség site at Polgár–Kengyel-köz: Dani (1999) 64–67, Pls 19–39.

<sup>300</sup> Feature 7: Gogáltan (1999a) 19–20.

<sup>301</sup> Batora (1984) 30; *idem* (1989a) 208.

<sup>302</sup> Zsidi (2005) 84.

<sup>303</sup> Tóth (2001b) 120, Fig. 3. 9, Fig. 5. 3–4.







Number of features	Sites	Total
number and type of features not exactly specified	13. Ballószög, 19. Battonya–MOM Forgácsoló, 38. Biatorbágy–Hosszúrétek-dűlő, 41. Biatorbágy–Szarvasugrás, 42. Biatorbágy–Tyúkberek and Törökbálint–Kukoricadűlő, 52. Budapest–293 Királyok Road, 53. Budapest–Budaörs Airfield, 54. Budapest–Kőérberek, 61. Cegléd–Bába–Molnár, Hartyáni-dűlő, 63. Cegléd–Bürgeházi-dűlő, 114. Gelej, 121. Hetényegyháza (Kecskemét), 132. Ipolytölgyes–Szentmárton-dűlő, 134. Iszkaszentgyörgy, 146. Kiskunfélegyháza–Kövágóér, 151. Kiszombor–Nagyszentmiklósi Road, 160. Kunadacs–Köztemető, 167. Lébény–Kaszásdomb, 171/a Makó–Vöröskereszt, 176. Mezőkeresztes–Csincse-tanya, 179. Mezőörs, 180. Mezőpeterd–Gát-szeg-dűlő, 183. Mosonszentjános–Kavicsbánya, 185. Mosonszentmiklós–Pálmajor, 198. Orgovány–Szelei domb, 200. Osli–Falu helyi-dűlő, 247. Szentendre–HÉV-végállomás, 332. Jelšovce–hospodársky dvor JRD, 333. Jelšovce–Dolné Funduše, 383. Grub an der March–Unterhaspel–South	30
1 feature	3. Abony–Kisbalaton-dűlő, 6. Bag–Peres-dűlő, 10. Bajna–TSz major, 12. Balatonkenese–7 Kapuvári Street, 17. Battonya–Georgievics-tanya, 60. Budapest–Kamaraerdő, 80. Debrecen–Városi téglagyár, 82. Doboz–Falu helyi erdészház, 95. Endrőd–Site 161, 126. Hódmezővásárhely–Barci-rét, 129. Hódmezővásárhely–Solt–Palé–Égető Bálint-tanya, 130. Hódmezővásárhely–Szakálhát–Diószegi Imre földje, 153. Kompolt–Kistér, 161. Kunfehértó–Kovács-tanya, 175. Mezőgyán–Gépműhely, 177. Mezőkovácsháza, 186. Nagydém–Felsőrépápuszta, 203. Örménykút–Szilai-halom, 217. Polgár–Király-érpart, 222. Rákócziújfalú–Felsővarsány, 234. Szarvas–Bezinai szőlők II, 244. Szeghalom–Környe, 262. Tatabánya–Birkás rét, 264. Tatabánya–Réti Road, 267. Tápiószele–Scythian cemetery, 306. Bajč–Medzi kanálmi, 314. Bučany, 322. Dunajská Lužná–Nové Košariska, 335. Kamenica nad Hronom, 337. Kamenín, 342. Lužianky, 352. Nitra–Mikov dvor, 356. Nitra–Dolné Krškany, 362. Patince, 363. Patince–Teplica, 365. Pezinok–Lazárna, 370. Šarovce, 398. Ziersdorf, 399. Bratčice area, 400. Hulín, 401. Miškovice, 405. Mušov–U Sv. Jana, 428. Stapar–Knežava bara	43
1 pit and six post-holes	341. Lozorno	1
2 pits	15. Battonya–Aradi Road I, 16. Battonya–Fővezeték II, 20. Battonya–Vörös Október Co-operative, 44. Boldog–Vasútállomás, 51. Budapest–Békásmegyer (BUVÁTI), 62. Cegléd–Intézeti and Bába–Molnár-dűlő, 83. Domony–J. Roobs garden, 108. Felgyő–Tábi-tanya, 299. Veresegyház–Ivacsok, 308. Bánov, 319. Dlhá nad Váhom, 340. Levice, 375. Vráble–Fidvár	13
3 features	360. Nitriansky Hrádok–Zámeček	1
ca. 4 features	343. Malé Kosihy–Törökdomb and Papföld, 409. Velké Pavlovice	2
5 pits	135. Jánosszállás–Katonapart, 277. Tiszakürt–Homoki szőlő, 368. Sládkovičovo	3
6 pits	49. Budapest–Aranyhegyi Road, 315. Čaka–Diely medzi lúkami, 327. Hurbanovo	3
8 pits	101. Esztergom–Szentgyörgymező, 239. Szeged–Kiskundorozsma, Nagyszék I	2
9 features	294. Vecsés–Site 54	1
9 pits and a well	72. Csongrád–Sertéstelep	1
10 features	296. Vecsés–Site 83	1
11 features	280. Tiszapüspöki–Karancs, 423. Uivar–Gomila	2
12 pits	71. Csongrád–Saroktanya, 259. Tarnabod–Berekalja, 361. Nové Zámky	3
ca. 12 pits and a ditch system	184. Mosonszentmiklós–Gyepföldek and Gyártelep	1
13 pits	265. Táp–Borbapuszta	1
18 pits	372. Tesárske Mlyňany	1

Fig. 8. Settlement feature types of the Makó–Kosihy–Čaka culture



Number of features	Sites	Total
20 pits	<b>201.</b> Oszlár–Nyárfaszög, <b>278.</b> Tiszalúc–Sarkadpuszta	2
24 features	<b>289.</b> Üllő–Site 5	1
26 features	<b>37.</b> Biatorbágy–Budapark	1
27 pits	<b>241.</b> Szeged–Kiskundorozsma, Subasa	1
30 features	<b>295.</b> Vecsés–Site 56	1
32 pits	<b>307.</b> Bajč–Vinohrady	1
40 features	<b>58.</b> Budapest–Rákoscscaba, Péceli Road	1
ca. 43 features	<b>346a.</b> Mužla–Čenkov–Vilmakert and Orechovy sad	1
55 features	<b>21.</b> Berettyóújfalu–Nagy-Bócs-dűlő	1
70 features	<b>67.</b> Csengele–Fecskés	1
houses and ovens	<b>46.</b> Budakeszi–Szőlőskert	1
house and various features	<b>1.</b> Abda–Hármasok, <b>73.</b> Csongrád–Vidresziget, <b>125.</b> Hosszúpályi–Homokbánya, <b>194.</b> Nyergesújfalu–Józsefpuszta, <b>225.</b> Salgótarján–Pécskő puszta, <b>263.</b> Tatabánya–Dózsakert, <b>408.</b> Strachotín	7

Fig. 8 (cont'd)

the vessels contained animals bones. The pit was interpreted as a sacrificial pit in view of its finds.<sup>304</sup> Four intact vessels were placed with their mouth downward in one of the pits of the Vecsés–Site 54 settlement (294).<sup>305</sup>

The assemblage of moulds found at the Üllő–Site 5 settlement can also be assigned here.<sup>306</sup> The pit in which the moulds were found also contained two broken vessels and animal bones deposited on the pit floor. The set of moulds, the prized treasure of a bronzesmith, had probably been wrapped in a bag before their deposition in the pit together with some stone artefacts. The assemblage, whether a sacrificial assemblage or a concealed hoard, was never recovered, even though the moulds were in perfectly good condition.

The unusual finds recovered from pits include a marinating vessels which had probably been deposited in the pit in an intact condition (Üllő–Site 5, Feature 4067). The vessel, an infrequent type in the Makó–Kosihiy–Čaka culture, was apparently set on top of an infilled pit, either during use or for indicating some ritual or as a commemoration of an event.<sup>307</sup>

### *Houses, huts and other buildings*

#### Large rectangular buildings

Post-framed rectangular buildings have been uncovered on five sites in the Makó–Kosihiy–Čaka distribution. The first timber-framed building, an unusually large structure measuring 7 m by 37 m (259 m<sup>2</sup>), was uncovered at Csongrád–Vidresziget in the Middle Tisza region.<sup>308</sup> A similarly large, north to south oriented houseplan measuring 13 m by 19 m with three rows of posts (247 m<sup>2</sup>) was

<sup>304</sup> *Kővári–Patay* (2005) 101–102.

<sup>305</sup> Wide-mouthed vessels stacked into each other were found in a beehive shaped pit at Orgovány–Szelei domb (198); unpublished.

<sup>306</sup> *Kővári–Patay* (2005) Figs 3–23.

<sup>307</sup> *Ibidem* 87, Fig. 25, Figs 33–34.

<sup>308</sup> Only the houseplan and a vessel with asymmetrical handles has been published: *Kalicz* (1984a) 95, Taf. XXIII. 1; *G. Szénásky* (1987–88) 152, 154. Cp. also *Kalicz–Schreiber* (1991) 12, Fig. 14. 7; *V. Szabó* (1999) 53, Fig. 1. 3.



excavated at the hilltop settlement of Salgótarján–Pécskő puszta.<sup>309</sup> A similar, but smaller north to south oriented, sunken building measuring 5 m by 15 m (75 m<sup>2</sup>) is known from Abda–Hármasok (1) in the Little Hungarian Plain. The house had a beaten clay floor and a structure of three rows of upright timbers.<sup>310</sup> A timber-framed house with the remains of an oven has been reported from the Tatabánya–Dózsakert (263) site in northern Transdanubia and a comparable rectangular timber-framed house was found at the Mosonszentmiklós–Gyepföldek (184) site. Unfortunately, the houseplan could not be documented owing to the strongly disturbed area in which it lay. The section of a probably rectangular timber-framed building (Feature 31) was excavated at Hosszúpályi (125) in eastern Hungary, the single building among the settlement's many pits.

It is thus clear that the construction technique<sup>311</sup> of both smaller residential buildings (75 m<sup>2</sup>) and much larger ones (*ca.* 250 m<sup>2</sup>) perhaps serving communal purposes<sup>312</sup> were known and employed during Makó–Kosihy–Čaka period. The pit clusters lying far apart from each other observed on some settlements can perhaps be seen as indirect evidence for the one-time existence of houses, assuming that the “empty” areas between them had once been occupied by above-ground buildings without bedding trenches, which leave few traces in the archaeological record.

#### Smaller rectangular/square buildings and round huts

Aside from the above larger buildings, smaller sunken rectangular/square structures and round huts with a lighter wooden structure<sup>313</sup> have also been found on Makó–Kosihy–Čaka settlements. The furnishings of these houses generally included a hearth.

A sunken round building encircled by post-holes has been published from Nyergesújfalu–József puszta (194). The fill contained a relatively high number of finds and the remains of several hearths were observed inside the building.

Excavated at the problematic Kánya site were two larger rectangular pits measuring 2.4 m by 2.9 m and 3.1 m by 2.6 m respectively, each containing a hearth. Both pits were surrounded by post-holes.<sup>314</sup> Traces of firing were documented on the almost level floor of a similar sunken feature with steep side walls, dug down to a depth of *ca.* 80 cm, but without any postholes around it at Cegléd–Bába–Molnár-dűlő (61). The finds from this feature included three jugs and a pot decorated with an encrusted pattern in the Vučedol style. The preliminary report on the Budakeszi–Szőlőskert (46) site mentions 6 m by 4 m large sunken buildings resembling the above structures, each with a round oven in the corner. Some of the buildings lay under a 50–60 cm thick burnt debris, indicating that the buildings had been consumed by fire. A strongly burnt layer of plastering was all that remained of what was perhaps a smaller building at Oszlár–Nyárfaszög (201).<sup>315</sup>

<sup>309</sup> The building was dated to the Makó–Kosihy–Čaka period in view of the few surface pottery finds and its structure: *Gall–Tankó* (2007).

<sup>310</sup> Few finds suggest an assignment to the Makó–Kosihy–Čaka culture. Cp. *Figler* (1996a) 9, note 12.

<sup>311</sup> Boat shaped houses, buildings with a similar structure measuring 14–16 m by 6 m (70–96 m<sup>2</sup>) have been found on settlements of the Bell Beaker–Csepel group at Budapest–Albertfalva and Szigetszentmiklós (*Endrődi* [1992] 89, 96–97; *Endrődi–Reményi* [2007]) and at Bucsú in western Hungary: *Ilon* (2005). In contrast, houses of this type have not been reported from the Nyírség culture: *Dani* (2005c). The buildings of the Somogyvár–Vinkovci culture were smaller and had a different structure.

<sup>312</sup> *Kalicz* (1984a) 101; *Csányi* (1996) 56. The size of these buildings suggests that a part of the herds was perhaps stalled in them. A similar function has been proposed for other comparable buildings of the Early Bronze Age (*Endrődi–Reményi* [2007] 129), and the Late Bronze Age: *V. Szabó* (2004) 141–142.

<sup>313</sup> *Csányi* (1996) 53, 56.

<sup>314</sup> *Csalog* (1941) 9–11, Pl. VI. Cp. SV cat. no. 103.

<sup>315</sup> *Koós* (1998) 12. A pit measuring 2 m by 3 m with a double post-hole and the section of a 6 m by 10 m large sunken “house” has been reported from the Kunadacs–Köztemető (160) site in the Danube-Tisza Interfluvium.



A few features suggesting similar buildings have been published from south-western Slovakia too. Tocík interpreted a large oval pit measuring 5.25 m across found at Nitrianský Hrádok–Zámeček (360) as a pit-house. The oval post-hole noted in the pit's north-eastern end and a smaller irregular pit in its north-western end seem to support this interpretation. A relatively large pit measuring 5.5 m by 2.2 m was uncovered at Kamenín–Kiskukoricás (337). Pit 8/59 of the Čaka–Diely medzi lúkami (315) site yielding a rich assortment of finds was interpreted as the remains of a hut. A pit-house was reconstructed from the larger pit and the post-holes around it at Nové Zámky (361) in the Nitra Valley. Accepting this reconstruction, Medunová-Benešová too interpreted a large, rectangular feature measuring 8.1 m by 7 m at Bratčice (399) in Moravia as a house. Remains of an oval hearth were found on the floor of the sunken building. Three smaller buildings measuring 4 m by 2 m and a larger one measuring 7.4 m by 3.1 m were found at Strachotín (408) lying on the western fringes of the culture's distribution.

The burnt daub and plaster fragments, some with twig impressions, recovered from the fill of the pits provide indirect evidence for the one-time existence of ovens and, also, of houses.<sup>316</sup> Several pits of the Berettyóújfalu–Nagy-Bócs settlement contained plaster fragments carefully smoothed and coated with white lime on one side.

### *Hearths and ovens*

Very few hearths and ovens are known, and the virtually not one single feature of this type has been preserved intact.

In addition to the hearths found inside the houses described above, the large-scale salvage excavations conducted over the past few years yielded evidence for the existence of open-air ovens.<sup>317</sup> An open-air oven with an ash-pit in front of it was excavated at Szeged–Kiskundorozsma–Subasa. The floor of the ash-pit had been carefully plastered and renewed five times.<sup>318</sup> Two open-air ovens have been reported from the Kiszombor–Nagyszentmiklósi Road site too.<sup>319</sup>

Indirect evidence for ovens/hearths comes from the plaster fragments found on several sites, such as Budapest–Aranyhegyi Road, Pit K14 (49), Csongrád–Sertéstelep (72), Domony (83), Kompolt–Kistér,<sup>320</sup> Mosonszentmiklós–Gyepföldek, Feature 215 (184), Szeged–Kiskundorozsma–Subasa (241), Üllő–Site 5 (289) and Nové Zámky (361). Fragments of the plastered baking plate of an oven were found at Berettyóújfalu–Nagy-Bócs (Feature 1982/4018).<sup>321</sup>

Evidence for kilns has yet to be found on Makó–Kosihiy–Čaka sites. The secondarily burnt vessels, and the high number of vessels and pottery sherds found in some pits can perhaps be interpreted as the raked-out contents of a potter's kiln (e.g. Čaka–Diely medzi lúkami).<sup>322</sup> The slag found in two pits of the Csongrád–Sertéstelep settlement (Features 6 and 14) can perhaps also be seen as evidence for local pottery manufacture.<sup>323</sup>

<sup>316</sup> Ballószög (13), Battonya–Fővezeték II (16), Jánosszállás–Katonapart (135), Mezőgyán–Gépműhely (175), Üllő–Site 5 (289); Čaka (315), Mužla–Čenkov (346), Nové Zámky (361). Cp. also Tóth (2001b) 125–126; Kővári–Patay (2005) 101.

<sup>317</sup> An open-air oven was uncovered at Kánya: Csalog (1941).

<sup>318</sup> Tóth (2003) 66; Szalontai–Tóth (2003c) Figs 2–3.

<sup>319</sup> Tóth (2001b) note 33; Kürti (2003) 164.

<sup>320</sup> Gogáltan (1999a) 19–20, Pl. 95. 1–2.

<sup>321</sup> Dani et al. (2006) 9.

<sup>322</sup> Pit from the 1950 season and Pit 6/61: Tocík (1951) 158–160; Vladár (1966) 255–256, Abb. 13–15.

<sup>323</sup> Tóth (2001b) 117, 118, 125.



## Wells

Little was known about the wells used by the Makó–Kosihy–Čaka communities. The investigation of three sites in the Great Hungarian Plain has brought a welcome change in this respect.

Unlined wells, functioning excellently in regions with a high groundwater table, have been unearthed at Csengele–Fecskés (67). Feature 4 of the Csongrád–Sertéstelep site, a 1 m deep pit with a diameter of 210 cm by 184 cm was probably a well. Although the pit could only be excavated down to a depth of 1 m owing to the high groundwater table, its vertical walls and the yellow sandy fill characterising wells nonetheless suggested a function as a well.<sup>324</sup>

Several wells had been dug for gaining water at Berettyóújfalu–Nagy-Bócs (21), a settlement girded by marshland. Some of these wells were subsequently used as sacrificial pits (e.g. Features 455/1148 and 887/2055). Another well type with a narrow cylindrical shaft and a diameter of 1 m has also been identified at this site (Feature 1442/3190). The finds from the well included a few pottery fragments and an antler.

## Ditches and bridges

Ditches separating certain areas of the settlement or enclosing a settlement have to date only been unearthed on the sites in the Mosonszentmiklós area in the Little Hungarian Plain. Ágnes Aszt uncovered a 8.8 m and 20 m long section of a pair of 2.4 m wide and 18–38 cm deep east to west oriented ditches at the Mosonszentmiklós–Gyepföldek settlement, which she dated to the Makó–Kosihy–Čaka period.<sup>325</sup> The complete length of the ditches is not known because only their western ends fell into the excavated area. The alignment of the settlement's timber-framed rectangular houses apparently followed the line of the ditches as far as could be established from the remains of the greatly disturbed settlement. A north–north-west to south-east running 3.5–3.8 m wide and 50 cm deep ditch marked and protected the western boundary of the Early Bronze Age settlement at Mosonszentmiklós–Gyártelep.<sup>326</sup>

A unique discovery, the remains of a wooden bridge supported by two parallel rows of posts were found in 2002 at Szeged–Kiskundorozsma–Subasa.<sup>327</sup> The radiocarbon dates for the soil samples taken from the post-holes suggested a date in the Early Bronze Age for the bridge once spanning the Maty Brook.<sup>328</sup> The bridge undoubtedly played a role in the trade network along the Maros and the Tisza in southern region of the Great Hungarian Plain.

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<sup>324</sup> Tóth (2001b) 115–116, Fig. 3. 1, 3.

<sup>325</sup> Aszt (2001).

<sup>326</sup> Aszt (2004) 242–243.

<sup>327</sup> Szalontai–Tóth (2003c) 87–91, Figs 7–8. A similar, single row of fifty post-holes was noted at the Kiskundorozsma–Hosszúhát site dating from the Early Bronze Age 2–3, which was interpreted as a palisade: Bende–Lőrinczy (2000). Another row of such post-holes, dated to the Early Bronze Age, was found during the construction of the M2 Motorway between Budapest and Vác, cp. Szalontai–Tóth (2003c).

<sup>328</sup> Szalontai–Tóth (2003c) Table 1: 5020±100–4510±80 BP. Although Early Bronze Age finds have been recovered from the site, the interpretation of the radiocarbon dates does not fully support the Early Bronze Age dating of the bridge.



### *The layout of the Makó–Kosihy–Čaka settlements*

Most of the currently known settlements have a dispersed layout. The basic units of the settlement, a house and a cluster of pits, lay 10 to 50 m apart over a fairly large area. Two main settlement types can be distinguished in terms of the intensity of occupation:<sup>329</sup>

- (1) briefly occupied, campsite-like settlements made up of a few pits,<sup>330</sup>
- (2) relatively larger settlements featuring several pits, and perhaps a house, ditches and open-air ovens (farmsteads, hamlets).

The few known cave sites appear to have been temporary shelters: Nagykovácsi–Remete-hegy caves (188–189) and Bajna–Öreglyuk (9).

*Smaller campsites made up of one to seven pits and clusters of pits, parts of larger settlements (Fig. 8)*

It is often difficult to establish whether the few pits uncovered in the course of an excavation conducted over a smaller area represent a brief occupation or a temporary campsite, or a smaller pit cluster within a larger settlement. The low number of pits noted across extensive, many hectares large areas investigated as part of large-scale excavations definitely suggests that these sites can be regarded as having been briefly occupied. One case in point is the Čaka (315) site, where six features were scattered over a roughly 20 hectares large area; another is Szeghalom–Környe (244), where a single pit was found over a 5000 m<sup>2</sup> large area. Single pits or clusters of a few pits are sometimes 11–25 m apart, as at Tiszkürt–Homoki szőlő (277), where the pits lay 15–22 m apart, although in extreme cases, they can be 52 m or even 250 m apart, as at Jánosszállás–Katonapart (135), Tarnabod–Berekalja (259) and Battonya–Aradi Road I (15).

*Large settlements made up of discrete pit clusters (Fig. 8)*

Discrete clusters made up of two to four pits generally lie 10 to 50 m apart on elongated<sup>331</sup> settlements with a loose layout. Occasionally, a cluster may comprise six or even fourteen pits as at Csongrád–Sertéstelep (72) and Szeged–Kiskundorozsma–Subasa (241). On some sites, the settlement features were concentrated over a smaller area of 100 m<sup>2</sup> as at Tarnabod–Berekalja (259), where twelve pits forming four clusters were found 15 to 55 m apart, at Oszlár–Nyárfaszög (201), where twenty features were uncovered, and at Vecsés–Ferihegyi-dűlő (295), where thirty features were excavated. It seems likely that the area between the pit clusters was occupied by houses or huts whose structure left virtually no traces in the archaeological record.<sup>332</sup> Houses, ritual pits, wells and open-air ovens (sometimes with an ash-pit) have also been identified on settlements of this type, which often featured internal ditches for separating certain areas.

The more intensive occupation of these settlements is also reflected by the higher number of settlement features. In addition to smaller settlements with no more than eight to twenty features, medium large settlements with up to thirty features are also known. The currently known largest settlements at Berettyóújfalu–Nagy-Bócs (21) and Csengele–Fecskés (67) were made up of fifty-five and seventy features found over an area of 30,000 m<sup>2</sup> and 10,000 m<sup>2</sup> respectively. The preliminary

<sup>329</sup> For a detailed discussion: Tóth (2001b); *idem* (2003) 66–67; *idem* (2004).

<sup>330</sup> *Ecsedy* (1995a) 18; *Csányi* (1996) 56.

<sup>331</sup> E.g. Szeged–Kiskundorozsma–Subasa, extending for 400 m.

<sup>332</sup> Tóth (2003) 67; *Kővári–Patay* (2005) 101.



report on the Budapest–Kőérberek (54) site mentions that 150 Early Bronze Age settlement features were uncovered over the 220,000 m<sup>2</sup> large investigated area.

In addition to various settlement features, spatially discrete solitary graves and grave clusters have been reported from some sites (Fig. 11). At Čaka, the graves and the settlement lay on the opposite banks of a stream, the only site where an arrangement of this type was observed. A cluster of four graves was found 250 m away from the pits at Oszlár, while at Szeged–Kiskundorozsma–Subasa a solitary inurned burial was found at a distance of 68 m from the settlement’s southern end. It seems likely that the burials of a small family, a mother and her children, found at Szeged–Kiskundorozsma–Nagyszék II too can be associated with a nearby settlement. Two solitary burials were found at Kompolt–Kistér, one lying 22 m from the settlement, the other at a distance of 122 m. The child burial found in one of the pits of the Csongrád–Sertéstelep settlement seems to be a unique, singular phenomenon.

Subsistence

Until recently, there was a general consensus that the dispersed layout of the known Makó–Kosihy–Čaka settlements could be explained by a subsistence based on pastoralism and that the Makó–Kosihy–Čaka culture represented an essentially mobile population.<sup>333</sup> However, it seems more likely that the lifeways of the Makó–Kosihy–Čaka population differed from region to region and that it was to some extent influenced by the local geographic and ecologic conditions. In addition to the patchy palaeoenvironmental record for this period,<sup>334</sup> the analysis of the animal bone samples too provides important information on subsistence practices (Fig. 9).

Site	Cattle (%)	Caprinae (%)	Sheep (%)	Pig (%)	Horse (%)	Dog (%)	Wild species (%)	Fish (%)	NISP Total	Reference
Abda–Hármasok	56	16.5	–	19.5	2	–	6	–	98	Bartosiewicz (1996)
Balatonkenese–7 Kapuvári Street	71	26	–	+	–	+	+	+	519	Patay (2002)
Csongrád–Sertéstelep	29	54	–	5	–	11.8	0.2	–	1141	Vörös (2001)
Kompolt–Kistér	24	15	–	48	–	7.4	5.6	–	54	Bartosiewicz (1999)
Mosonszentmiklós–Gyepföldek	66	3	–	22	–	3	–	6	150	Kőrösi (2001)
Mosonszentmiklós–Pálmajor	49	33	2	6.5	3.5	2	2	2	55	Bartosiewicz (1996)
Táp–Borbapuszta	61	31	2	–	–	4	2	–	51	Bartosiewicz (1996)
Üllő–Site 5	91	4.8	–	0.6	3.1	0.5	–	–	1111	Kőrösi (2005)

Fig. 9. Archaeozoological finds from the settlements of the Makó–Kosihy–Čaka culture

<sup>333</sup> E.g. Kalicz (1984a) 101.  
<sup>334</sup> A palaeoenvironmental reconstruction has been published for a few regions in northern, north-eastern and western Hungary. Cp. Kiss (2004a); Dani (2005a); *idem* (2005b); Kiss–Kulcsár (2005a); *idem* (2005b); Bondár–Kiss (2007); Kiss–Kulcsár (2007).



The currently available data indicate a dominance of cattle breeding,<sup>335</sup> as well as a relatively high, though varying proportion of sheep/goat and pig on some sites. Dog remains appear in the animal bone sample from almost every site. Wild species and fish appear less frequently among the animal remains recovered from settlement pits. The amount of animal bones recovered from a particular settlement varies: some sites yielded few or virtually no bones (e.g. Tiszakürt–Homoki szőlő and Tarnabod–Berekalja) and neither were the animal bones discarded proportionately in the pits of a particular settlement because some pits yielded more bones than others (see above, especially the pits uncovered at the Balatonkenese, Üllő and Csongrád–Sertéstelep sites). Minor regional differences can also be demonstrated in the mostly small samples.

Cattle was followed by sheep/goat on two sites in the Little Hungarian Plain (Táp–Borbapuszta and Mosonszentmiklós–Pálmajor). At Abda, sheep/goat appeared in roughly the same proportion as pig. In contrast, the ratio of sheep/goat was negligible (3 per cent) compared to cattle (66 per cent) and pig (22 per cent) at the Mosonszentmiklós–Gyepföldek site.<sup>336</sup> A few horse bones were found at Abda and Mosonszentmiklós–Pálmajor. The pit excavated at the Balatonkenese settlement contained mostly cattle (71 per cent) and sheep/goat (26 per cent).

The Üllő–Site 5 site in central Hungary yielded a total of 1111 animal bones, recovered from seventeen of the twenty-four pits. The archaeozoological sample was dominated by cattle (91 per cent), with a much lower proportion of sheep (4.8 per cent) and a minimal occurrence of pig (0.6 per cent). The horse bones in the sample (3.1 per cent) came from low and medium high individuals (129.5–138 cm). The absolute dominance of cattle can be attributed to the fact that of the 742 bones recovered from Pit 5600, 736 came from cattle and represented at least fourteen large-bodied adult individuals. The remaining bones came from sheep and horse (four and two bones respectively). The preliminary analysis of the animal bone sample from Jánosszállás–Katonapart,<sup>337</sup> Tiszalúc–Sarkad<sup>338</sup> and Berettyóújfalu–Nagy-Bócs<sup>339</sup> too indicates a dominance of cattle.

Slightly different proportions can be noted in the southern part of the Great Hungarian Plain. Eight features of the Csongrád–Sertéstelep site yielded a sample of 1141 animal bones.<sup>340</sup> About two-thirds of the entire sample, 737 bones, came from Feature 6. Domestic species were dominated by sheep (61.6 per cent), followed by cattle (32.8 per cent) and pig (5.6 per cent). The examination of the age at death indicated that young sheep and cattle were mainly exploited for their meat, while adult animals were kept for their milk and wool,<sup>341</sup> or as draught animals. Even though the Csongrád settlement was located near water, fish hardly figured in the occupants' diet and no more than fourteen mussels came to light. This was the first animal bone sample which definitely indicated that the Makó–Kosihy–Čaka population raised their animals primarily for their meat.<sup>342</sup> The smaller flocks

<sup>335</sup> Similar proportions can be noted on the sites of the Nyírség culture: a dominance of cattle, followed by pig, caprinae, a few dogs and horses: *Dani* (1999) 66–67; *Vörös* (1999) 74. The ratio of wild species and fish is very low.

<sup>336</sup> *Kőrösi* (2001). A similar proportion was noted in the animal bone sample from the Árpadian Age.

<sup>337</sup> *Kürti* (1974) 38, note 3.

<sup>338</sup> *Szathmári* (1999b) 60, note 3; István Vörös analysed the animal bone sample recovered from nine pits and found a dominance of cattle, followed by caprinae, pig, horse and a few wild species.

<sup>339</sup> *Dani et al.* (2006).

<sup>340</sup> *Tóth* (2001b) 129–130; *Vörös* (2001).

<sup>341</sup> Wool production is indicated by a few clay spindle whorls and clay weights.

<sup>342</sup> The archaeozoological analysis of the animal bone samples of the Late Bronze Age Gáva culture showed similar frequencies. At the same time, meat consumption was about one-fifth of that during the Early Bronze Age. Cp. *Vörös* (2001) 163.



and herds were guarded by medium large herding dogs on the testimony of the surviving dog bones, accounting for 11.8 per cent of the sample.

A dominance of pig, regarded as an indication of a sedentary life-style, has only been demonstrated in the animal bone sample from Kompolt–Kistér in the northern part of the Great Hungarian Plain.<sup>343</sup>

In the lack of archaeobotanical samples, crop cultivation is only indicated by the few finds of quernstones.<sup>344</sup>

### *Settlement network*

Distributed over an extensive area among the most varied ecologic and geographic conditions, most Makó–Kosihy–Čaka settlements lie in open plainlands, on loessy-sandy soils along waters or in river valleys.<sup>345</sup> The evidence for Makó–Kosihy–Čaka settlements on a few peaks of the Northern Mountain Range is inconclusive (Ecseg–Várhegy, Piliny–Várhegy, Salgótarján–Baglyas, Salgótarján–Pécskő and Perőcsény–Jancsihegy). Makó–Kosihy–Čaka finds have also been recovered from a few caves in the Buda Mountains and the Gerecse Mountains (Nagykovácsi–Remete-hegy caves and Bajna).

Little is known about the position of a particular site in the Makó–Kosihy–Čaka settlement hierarchy and we have virtually no criteria for identifying the differences in the size and layout of different settlements or in their material. Only a few general observations can be made at the most.

A loose settlement network of small settlements – campsites, farmsteads, hamlets and perhaps smaller villages – can be reconstructed. In addition to crop cultivation, the Makó–Kosihy–Čaka communities were engaged in pastoralist stockbreeding, although its importance in subsistence varied from region to region. It would appear that none of the currently known Makó–Kosihy–Čaka sites occupied an outstandingly prominent position in the settlement hierarchy. The stray Makó finds from the higher-lying hilltop settlements do not reflect an intensive occupation or that these sites functioned as central places.

It would appear that the main difference between the two major settlement types was functional rather than one of status in a hierarchy. While size variability can certainly be noted, the find assemblages do not reflect major differences between individual settlements. Evidence for metalworking comes from both smaller settlements, such as Domony and Vel'ký Meder, and larger ones, such as Űllő–Site 5. The more intensively occupied settlements show a concentration along the Danube (Little Hungarian Plain, Mužla and the Budapest area), and in the Tisza region and the Berettyó Valley in the east. Smaller settlements appear to have been the norm in south-western Slovakia.

The regional concentration of settlements may reflect a more intensive regional occupation. However, the chronology of the settlements relative to each other is far from clear. The regional network of contemporary settlements can be reconstructed for smaller regions which have been intensively surveyed and where excavations have been conducted on some sites. It must also be

<sup>343</sup> László Bartosiewicz has correctly pointed out the incidental nature of small samples: *Bartosiewicz* (1999) 324 and Table I.

<sup>344</sup> E.g. Berettyóújfalu–Nagy-Bócs (21), Grave 824/1889, Csongrád–Sertéstelep (72), Tarnabod–Berekalja (259).

<sup>345</sup> Settlement density was much lower compared to the Late Copper Age (*Bondár* [2002b]), and the Middle Bronze Age: *Reményi* (2003).



borne in mind that the concentration of settlements does not necessarily imply contemporaneous settlements, but may simply be a reflection of frequent shifts in occupation.

More densely occupied zones can be assumed along the trade routes leading through major river valleys, for example in the Nitra and Bajč area in south-western Slovakia, and along certain sections of the Danube in the Mužla, Nyergesújfalu, Látatlan, Süttő and Budapest area (*Figs 4–6*). The same holds true for the major crossing places over the Tisza,<sup>346</sup> for example at the Böld ford between Csongrád and Szentes (Csongrád area: 71–73, 108), in the Szentes area (249–251), in the Maros–Tisza confluence area (Szeged–Kiskundorozsma: 135, 239–241) and in the Hódmezővásárhely area (126–131), where the settlement density was higher and site occupation more intensive (*Fig. 3*). The systematically surveyed areas in south-eastern Hungary too suggest a denser settlement network. More intensively occupied areas can be assumed in the Berettyóújfalu, Tiszalúc and Oszlár area in northern and eastern Hungary, as least judging from the incidence of larger settlements in these areas.

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<sup>346</sup> Regarding the Roman roads connecting the Danube and the Tisza, there is more evidence for the crossing places over the Tisza, cp. *Szalontai–Tóth* (2003c) 86–87.



## The burials of the Makó–Kosihy–Čaka culture

### *The number of burials and their regional distribution*

Similarly to settlement sites, burials are generally found dispersed, without any indication of larger clusters (Figs 10–11).<sup>347</sup> The number of graves is low even on extensively investigated sites. The analysis of the settlements suggested that the culture's subsistence was in part based on pastoralist stockbreeding involving seasonal migrations. In addition to the loose, dispersed layout characterising the culture's settlements, this subsistence pattern is also reflected by the lack of larger cemeteries from the initial period of the Hungarian Early Bronze Age, even though the few available radiocarbon dates indicate that the Makó–Kosihy–Čaka sequence spanned several hundred years. Most of the currently known burial sites yielded one to three graves or ten at the most, lying near each other.

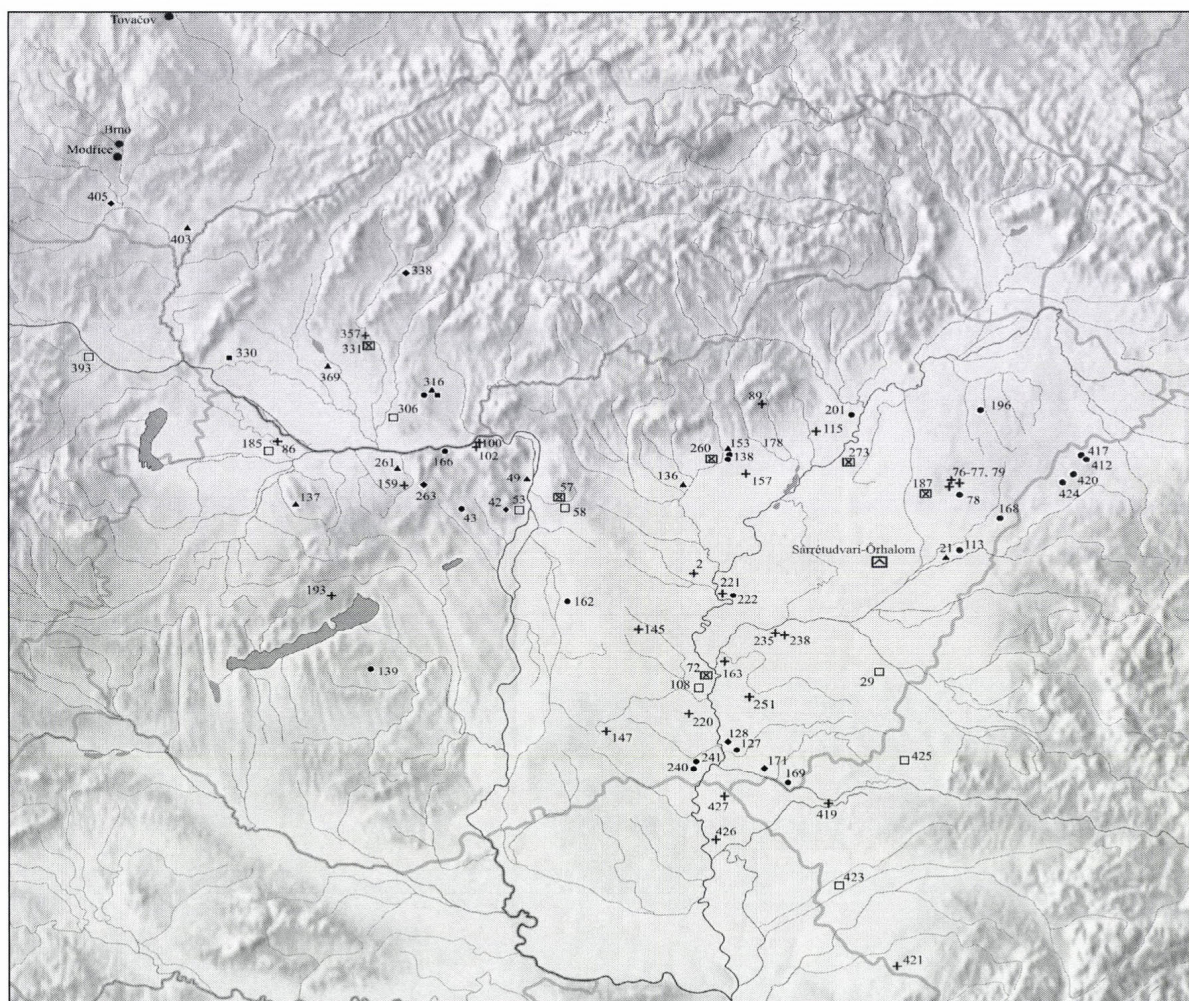


Fig. 10. Burials of the Makó–Kosihy–Čaka culture

● inurned, ▲ scattered cremation, ■ mixed cremation, □ cremation, ☒ inhumation,  
◆ symbolic, + finds of one or more intact vessels

<sup>347</sup> Cp. Kulcsár–Szabó (2000); Némethi–Dani (2001); Kulcsár (2002a); Tóth (2002).



Sites	Number of burials	Burial rite	Settlement
<b>Hungary</b>			
21. Berettyóújfalu–Nagy-Bócs-dűlő	4	2 scattered cremation 2 (?) scattered cremation	+
29. Békéscsaba–Alvégi-legelő, majorok	1	cremation (?)	–
42. Biatorbágy–Tyúkberek and Törökbálint–Kukoricadűlő	1	symbolic (?)	+
43. Bicske–Szőlőhegy	1	inurned	–
49. Budapest–Aranyhegyi Road, Mocsáros	1	scattered cremation	+
53. Budapest–Budaörs Airfield	1 (unpublished)	cremation	+
57. Budapest–Szentmihályi Road	1	inhumation	–
58. Budapest–Rákoscaba, Péceli Road	1	cremation	+
72. Csongrád–Sertéstelep	1	inhumation	+
78. Debrecen–Köntöskert, 30 Bezerédj Street	1	inurned	+
108. Felgyő–Tábi-tanya	1	cremation	+
113. Gáborján–Csapszékpart	1	inurned	under a Bronze Age tell settlement
127. Hódmezővásárhely–Gorzsá-Cukor-tanya	1	inurned	–
128. Hódmezővásárhely–Gorzsá-Kovács István-tanya	1	symbolic	–
136. Jászdózsa–Kápolnahalom	1	scattered cremation	under a Bronze Age tell settlement
137. Kajárpéc–Pokolfadomb	2	scattered cremation	–
138. Kál–Legelő	6	inurned	–
139. Kánya	1	inurned	+
153. Kompolt–Kistér	2	1 inurned 1 scattered cremation	+
162. Kunpeszér–Sinai-hegy	1	inurned (?)	–
166. Lábatlan–Rózsa Ferenc Street	1	inurned (?)	–
168. Létavértes–6 Irinyi Street	1	inurned	–
169.c. Magyarcsanak–Bökény	1	inurned	+
171. Makó–Vöröskereszt	1	symbolic	+
178. Mezőkövesd–Mocsolyás	1	inurned (?)	–
185. Mosonszentmiklós–Pálmajor	4 (unpublished)	cremation	+
187. Nagyhegyes–Elep 25	1	inhumation	–
196. Nyíregyháza–Oros	1	inurned	–
201. Oszlár–Nyárfaszög	4	inurned	+
222. Rákócziújfalu–Felsővarsány	1	inurned	+
240. Szeged–Kiskundorozsma, Nagyszék II	3	inurned	–
241. Szeged–Kiskundorozsma, Subasa	1	inurned	+
260. Tarnasáday	1	inhumation	–
261. Tata–Tófarok	1	scattered cremation	–
263. Tatabánya–Dózsakert	1	symbolic	+
273. Tiszacsege	1	inhumation	–

Fig. 11. Burials of the Makó–Kosihy–Čaka culture



Sites	Number of burials	Burial rite	Settlement
<b>Slovakia</b>			
306. Bajč–Medzi kanálmi	1	cremation (?)	+
316. Čaka–Kopec	3	1 inurned, 1 mixed cremation 1 scattered cremation	+
330. Ivanka pri Dunaji	1	mixed cremation	–
331. Ivanka pri Nitre	1	inhumation	–
338. Krásno–Kráčiny	2	symbolic (?)	–
369. Šal’a	1	scattered cremation	–
<b>Austria</b>			
393. Schwechat–Brauerei	1	cremation (?)	–
<b>Moravia</b>			
403. Moravská Nová Ves–Hrušky	1	scattered cremation	–
405. Mušov–U Sv. Jana	1	symbolic (?)	+
<b>Romania</b>			
412. Carei–Bobald	1	inurned	under a Bronze Age tell settlement
417. Foieni–Fântâna Pășune	1	inurned	–
420. Pișcolt–Nișipărie	7	inurned	–
423. Uivar–Gomila	unpublished	cremation	+
424. Valea lui Mihai	1	inurned	–
425. Zimandu Nou	unpublished	cremation (?)	–
<b>Total</b>	<b>71 burials and ca. 7 unpublished burials / 51 sites</b>		<b>21 sites and 3 sites under a Bronze Age tell settlement</b>

Fig. 11 (cont’d)

In spite of the extensive Makó–Kosihy–Čaka distribution, the number of known burials is rather low, numbering about seventy burials. It seems likely that the smaller concentrations in the Érmellék region, in the Csongrád–Szeged, Hódmezővásárhely–Makó area and along the line of the M3 Motorway on the northern fringes of the Great Hungarian Plain are merely a reflection of the intensity of research in those areas (Fig. 12).

Burial rite	Number of burials							Total
	Region I	Region II	Region III	Region IV	Region V	Region VI	Region VII	
Inurned cremation	21	13	–	3	1	–	–	38
Scattered cremation	4	2	1	3	2	–	1	13
Mixed cremation	–	–	–	–	2	–	–	2
Cremation	2	–	1	–	1	1	–	5
Symbolic	2	–	1	1	2	–	1	7
Inhumation	3	1	1	–	1	–	–	6
(unpublished)	(min. 2)	–	(1)	(4)	–	–	–	(min. 7)
<b>Total</b>	<b>32 (+2)</b>	<b>16</b>	<b>4 (+1)</b>	<b>7 (+4)</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>71 (+ min. 7)</b>

Fig. 12. Regional distribution of the Makó–Kosihy–Čaka burials according to the burial rite



Most of the known graves are solitary burials, without any traces of a settlement in their vicinity (Fig. 11). The crouched inhumation burials from the Early Bronze Age 1–2, whose cultural attribution is uncertain, can likewise be assigned to the category of solitary burials (Fig. 16, Sites 57, 187, 260, 273, 331). The smaller grave clusters, made up of two to seven burials, can be regarded as the culture's graveyards, some of which have been identified near settlements (Fig. 11, Sites 21, 137, 138, 153, 201, 240, 316, 338, 420).<sup>348</sup> Two remarkable sites must be mentioned in this respect: one is Pişcolt–Nişipărie, where a small cemetery section of seven burials was uncovered, the other is the Kál–Legelő site, where six burials forming two smaller grave clusters have been found.

Only in rare instances have burials been discovered near settlements or dug into the natural subsoil under later Bronze Age tell settlements (Fig. 11, Sites 113, 136, 412). Owing to the Makó–Kosihy–Čaka culture's dispersed settlement layout, burials possibly associated with a particular settlement have only been found in the case of excavations conducted over extensive areas and on sites lying in more intensively researched and continuously monitored regions.<sup>349</sup> The graves and the scattered settlement features sometimes lay quite near to each other, no more than 20–30 m apart, as at Kompolt–Kistér,<sup>350</sup> although the norm appears to have been a distance of 68–100 to 300 m, as at Budapest–Aranyhegyi Road (49), Biatorbágy–Tyúkberek (42), Čaka (316), Kompolt–Kistér (153), Oszlár–Nyárfaszög (201)<sup>351</sup> and Szeged–Kiskundorozsma–Subasa (241). A small stream separated the settlement and the burial ground at Čaka (315–316). This is the single site in south-western Slovakia, where both a settlement and a cemetery were identified. Owing to the low number of burials known from a particular site, we may at the most merely assume that the burials formed separate grave clusters since there is little in the way of evidence for this in the archaeological record: the two graves known from Kompolt lay at a distance of 144 m from each, while at Kál the graves formed two smaller clusters. Five of these burials (Graves 14–15, 17, 31–32) lay beside each other, no more than 3 to 7.5 m apart, while the sixth one (Grave 53) lay some 18–22 m farther.

Mention must be made of the graves dug into the natural subsoil underlying the tell settlements appearing at the turn of the Early and Middle Bronze Age (Fig. 11, Sites 113, 136, 412). Three securely documented instances can be quoted, all of which can be dated to the period preceding the arrival of the tell settlement's later occupants: the first comes from Gáborján–Csapszékpart<sup>352</sup> in the Berettyó Valley, the second from Carci–Bobald,<sup>353</sup> where the excavated burials bore a close

<sup>348</sup> The section of some cemeteries containing what were perhaps inurned/cremation burials and the grave goods from the burials discovered at Mosonszentmiklós–Pálmajor (185), Uivar–Gomila (423), Zimandu Nou (425) are known only from a brief reference. The inhumation burials at Sárretudvari–Őrhalom (Dani–M. Nepper [2006]) can perhaps be regarded as the graves of a “cemetery” used over a longer period of time.

<sup>349</sup> Uncertain evidence for both settlement and cemetery comes from Magyarcsanak (169) and Makó–Vöröskereszt (171) in the southerly areas of the Great Hungarian Plain and the Maros Valley.

<sup>350</sup> Burials lay at distances of 22 m and 122 m from the single pit of the settlement uncovered at Kompolt. The distance between the two burials was even greater, 144 m: *Gogáltan* (1999a).

<sup>351</sup> The four inurned cremation burials lay at a considerable distance, some 250–300 m from the dense cluster of twenty settlement pits of the Makó–Kosihy–Čaka culture in a roughly 100 m<sup>2</sup> large section of the 2 hectares large area investigated at Oszlár. It must in all fairness be mentioned that the area between the pits and the burials was not excavated, cp. *Koós* (1998) 11, Abb. 4; *idem* (1999).

<sup>352</sup> Sz. Máthé has variously assigned this grave to the Nyírség and Makó–Kosihy–Čaka culture: *Sz. Máthé* (1988) 38. Bóna regarded the grave as a burial of the Gyula–Roşia group: *Bóna* (1993) 79, note 91. Dani, who published the finds from grave, assigned the burial to the Makó–Kosihy–Čaka culture: *Dani* (1997a) 56–57; cp. also *idem* (1998) 58–60.

<sup>353</sup> The grave was initially assigned to the Sanislău/Szaniszló group of the Early Bronze Age 3: *Németi–Dani* (2001) 112. The grave was later dated to the Makó–Kosihy–Čaka culture: *Dani* (2005c).



resemblance to Makó–Kosihy–Čaka graves as regards both the burial rite of inurned cremation and the grave pottery, while the third from Jászdózsza–Kápolnahalom, where a scattered cremation burial containing a vessel typical for the late Makó–Kosihy–Čaka phase was found under the settlement mound.

### *The burial rite*

The period's dominant burial rite was cremation, and the Makó–Kosihy–Čaka culture was no exception.<sup>354</sup> There is more evidence for inurned burials, than for scattered cremation ones and burials of uncertain rite or symbolic graves (*Fig. 12*). A few (crouched) inhumation burials can perhaps also be assigned here.

#### *Inurned burials*

The culture's currently known thirty-eight burials indicate that inurned burials were more widespread east of the Danube (*Fig. 12*: Regions I–II, thirty-four burials followed this rite),<sup>355</sup> although graves of this type have been found at Čaka–Kopec–Grave 4 (316) in south-western Slovakia, as well as at Bicske (43), Kánya (139) and Lábatlan–Rózsa Ferenc Street (166) in Transdanubia. Smaller cemetery sections of four to seven graves from the northern and eastern areas of the Great Hungarian Plain too indicate the practice of this rite (Kál–Legelő, Oszlár–Nyárfaszög, Pişcolt–Nişipărie; *Fig. 13*, *Sites 138, 201, 420*). It would appear that the deposition of the ashes in an urn was preferred in the culture's eastern distribution. The joint occurrence of inurned and scattered cremation burials has been documented at Čaka–Kopec and at Kompolt–Kistér (153), and there is also evidence for both rites in one grave: at Ivanka pri Dunaji (330), ashes were found in a handled mug and scattered on the grave floor, while Grave 5 at Čaka (316) had a jug serving as the urn for ashes deposited in one part of the roughly figure-of-eight shaped grave pit, and ashes scattered over the floor of the grave in another part (*Fig. 14*, *Sites 316, 330*).<sup>356</sup>

Inurned burials generally have a shallow grave pit. The outlines of the grave pit are often difficult to observe in the humus layer even in the case of professionally excavated sites, as at Kál, Kompolt, Oszlár and Mezőkövesd. The depth of the grave pits ranged between 15–35 cm and 50–80 cm, although at Lábatlan, the grave pit lay at a depth of 130 cm and at 152 cm at Carei–Bobald, while at Ivanka pri Dunaji, the grave depth was 160–180 cm. The form of the grave pit could in many cases only be reconstructed from the position of the grave pottery: oval graves were rare, the norm being round pits with a diameter of 80–100 cm as at Čaka (Grave 4) and Kompolt–Kistér (Grave 1) or figure-of-eight shaped pits as at Čaka (Grave 5).

Inurned burials generally contained fewer pottery vessels, usually no more than five (*Fig. 13*). Most of the graves at Kál, Oszlár and Pişcolt conformed to the general practice of the Makó–Kosihy–

<sup>354</sup> For an overview of the period's burial customs, cp. *Vladár* (1966) 266–271; *Kalicz* (1968) 81–82; *idem* (1984a) 95–96; *Kalicz-Schreiber* (1991) 10–11; *Bóna* (1992a); *Kalicz-Schreiber* (1994) 40; *Dani* (1998) 56; *Dani–Kulcsár* (2000); *Kulcsár–Szabó* (2000); *Németi–Dani* (2001); *Kulcsár* (2002a); *Tóth* (2002); *Dani* (2005c); *Šuteková* (2005).

<sup>355</sup> Later, the Nyírség culture too adopted the inurned cremation rite, cp. *Dani* (1997a); *idem* (2005c) for an overview.

<sup>356</sup> The bodies were burnt at a high temperature and it is possible that the ashes were repeatedly cremated (Kál–Legelő), although cremation at a lower temperature was more general: *Németi–Dani* (2001). Very often, the teeth of the deceased were not placed in the grave, cp. *Szathmáry* (1997); *Kulcsár–Szabó* (2000); *Németi–Dani* (2001); *Szathmáry* (2001).



Čaka culture in that inurned burials contained a single vessel, in which the ashes were deposited (fourteen burials: *Fig. 13, Sites 43, 138/14, 138/15, 138/31, 139, 196, 201 (?)*,<sup>357</sup> 316, 420/33, 420/C, 420/1968). The vessels serving as urns were most often amphoras, pots or one-handled pots.

In many cases, a bowl was set beside the vessel containing the ashes, or in its mouth, although the bowl was sometimes turned upside-down to cover the urn (nine burials: *Fig. 13, Sites 138/17, 138/53, 153, 240/1615, 240/1616, 240/1630, 420/74, 420/121, 424*). Various vessel types were used as urns, ranging from amphoras and amphora-like vessels to larger pots or handled pots. The ashes were placed in an amphora at Szeged–Kiskundorozsma–Subasa, beside which lay an interior decorated bowl instead of the customary more simple pieces (*Fig. 13, Site 241*). A handled mug or a pot was sometimes deposited instead of a bowl, as at Gáborján–Csapszékpart and Carei–Bobald (*Fig. 13, Sites 113, 412*).

The culture's inurned burials rarely contained three vessels (five burials: *Fig. 13, Sites 78, 168, 169/c, 178, 420/90*). In addition to the pot or amphora for the ashes, the other vessels placed in the burial ranged from conical or biconical bowls occasionally adorned with a crescentic rib, an anthropomorphic cup (Debrecen–Köntöskert), a mug (Létavértes) and an interior decorated bowl (Magyarcsanád–Bökény), to handled pot (Pişcolt, Grave 90). However, an entirely different grave pottery assemblage also be quoted from Mezőkövesd–Mocsolyás for example, where the grave contained a large pot, a smaller pot and a rib decorated urn/jug.

Graves containing four or five vessels can be assigned to the category of Makó–Kosihy–Čaka burials with a high number of grave goods (seven burials: *Fig. 13, Sites 127, 138/32, 162, 166, 222, 417, 420/65*). Considerable variation can be noted in the combination of the vessel types in these burials. In the Grave 32 at Kál–Legelő a bowl probably accompanied each of the larger pots and the handled pot presumably containing the ashes and a flask-like vessel was also placed in the burial. One burial from Lábatlan–Rózsa Ferenc Street had two bowls and two small mugs in addition to the urn, while the grave at Kunpeszér–Sinai-hegy contained a smaller urn beside the large one and two interior decorated bowls (a rather unusual practice), as well as a flask.<sup>358</sup> A small bowl was found among the ashes in the amphora-like urn from Hódmezővásárhely–Gorzsa-Cukor-tanya, where a handled jug and a jug with asymmetrical handles were set beside the urn.

The most common grave goods placed in inurned burials were the various pot and amphora types in which the ashes were deposited, although other vessels, whose form and type are not mentioned in the laconic grave descriptions, were sometimes also used as urns. Handled pots and bowls were often deposited in the graves too. Most burials contained a single bowl, although the deposition of two bowls was observed at Kál (Grave 32) and Lábatlan–Rózsa Ferenc Street. Interestingly enough, interior decorated bowls, one of the culture's hallmarks, are absent from the grave pottery at Kál for example, but can be found at Kunpeszér–Sinai-hegy, Magyarcsanád–Bökény, Szeged–Kiskundorozsma–Subasa, Foieni–Fântâna Pășune and Pişcolt–Nișipărie. This can perhaps be explained by the differences in what was customarily placed in the grave in the case of different burial rites.

Some graves contained vessels which were clearly alien to the Makó–Kosihy–Čaka ceramic tradition. The finds from the inurned burial at Hódmezővásárhely–Gorzsa-Cukor-tanya included

<sup>357</sup> The four strongly disturbed burials discovered at Oszlár each contained at least one vessel (sometimes two): *Koós* (1998) 11, Abb. 3. 1–3.

<sup>358</sup> This unpublished grave has also been described as a scattered cremation burial: *Kalicz-Schreiber* (1994) 40.



Sites	Number of burials	Number of vessels	Type of vessels and other grave goods	Age and sex of the deceased	Settlement
43. Bicske–Szőlőhegy	1	1	amphora	–	–
78. Debrecen–Köntöskert, 30 Bezerédj Street	1	3	cup, bowl, deep bowl	18–25 years old female	+
113. Gáborján–Csapszékpart	1	2	pot, mug	–	–
127. Hódmezővásárhely–Gorzsa-Cukor-tanya	1 (Grave 9)	4	amphora, bowl, jug, vessel, with asymmetrical handles	–	–
138. Kál–Legelő	Grave 14	1	pot	–	–
	Grave 15	1	pot	–	–
	Grave 17	2	pot, bowl	–	–
	Grave 31	1	pot	–	–
	Grave 32	5	pot, one-handed pot, flask shaped vessel, bowls	–	–
	Grave 53	2	amphora, bowl	–	–
139. Kánya	1	1	amphora	–	+ (?)
153. Kompolt–Kistér	Grave 1	2	amphora, bowl	–	+
162. Kunpeszér–Sinai-hegy	1	4	urn, flask, 2 interior decorated bowls	–	–
166. Lábatlan–Rózsa Ferenc Street	1	5	urn, 2 mugs, 2 bowls	–	–
168. Létavértes–6 Irinyi Street	1	3	amphora, fragment of a bowl and a mug	–	–
169.c. Magyarcsanád–Bökény	1	3	pot, interior decorated bowl, bowl, pin fragment	–	+
178. Mezőkövesd–Mocsolyás	1	3	pot, small pot, amphora (?)	–	–
196. Nyíregyháza–Oros	1	1	amphora	–	–
201. Oszlár–Nyárfaszög	Grave 180	1 (?)	one-handed pot	–	+
	Grave 181	1 (?)	cup	–	+
	Grave 189	1 (?)	pot	–	+
	Grave	1 (?)	?	–	+
222. Rákócziújfalu–Felsővarsány	1	4–5	urn, bowl, mugs	–	+
240. Szeged–Kiskundorozsma, Nagyszék II	Grave 1615	2	amphora, bowl fragment	5–7 years old child	–
	Grave 1616	2	amphora, bowl fragment	adult (female?)	–
	Grave 1630	2	amphora, bowl fragment	7–9 years old child	–
241. Szeged–Kiskundorozsma, Subasa	Grave 234	2	amphora, interior decorated bowl	–	+
316. Čaka–Kopec	Grave 4	1	amphora	–	+
412. Carei–Bobald	1 (M1/1997)	2	amphora, pot	35–55 years old man	–

Fig. 13. Inurned burials of the Makó–Kosihy–Čaka culture



Sites	Number of burials	Number of vessels	Type of vessels and other grave goods	Age and sex of the deceased	Settlement
417. Foieni–Fântâna Pășune	1	4	bowl, interior decorated bowl, 2 pots	–	–
420. Pișcolt–Nișipărie	Grave 33	1	pot	–	–
	Grave 65	4	pot, interior decorated bowl, biconical bowl, bowl	–	–
	Grave 74	2	one-handed pot, bowl	–	–
	Grave 90	3	amphora, one-handed pot, bowl	–	–
	Grave 121	2	pot, bowl	–	–
	Grave C	1	amphora	–	–
	Grave A/1968	1	pot	–	–
424. Valea lui Mihai	1	2	pot, bowl, necklace (animal teeth)	–	–

Fig. 13 (cont'd)

a vessel with asymmetrical handles,<sup>359</sup> whose analogies can be quoted from the Somogyvár–Vinkovci assemblages in the Srem and the Roșia group.<sup>360</sup> A flask deposited in the inurned burial at Kunpeszér–Sinai-hegy can probably also be explained by cultural impacts from the Somogyvár–Vinkovci culture. The inurned grave from Lábatlan contained small handled mugs of the type which were regularly deposited in the late Makó–Kosihy–Čaka scattered cremation burials in northern Transdanubia.

The grave pottery from the inurned burials of the Makó–Kosihy–Čaka culture conforms to the culture's general types, confirming that the inurned cremation burials with these vessels represent the burial rite most widely practiced by Makó–Kosihy–Čaka communities.

#### *Scattered cremation burials*

The currently known scattered cremation burials (Fig. 12, Fig. 14) show a concentration in the northern Makó–Kosihy–Čaka distribution. They appear to have been more common west of the Danube (Budapest–Aranyhegyi Road, Tata–Tófarok<sup>361</sup>) and in south-western Slovakia (Čaka, Grave 8, Šaľa), especially if the culturally uncertain burials from Kajárpéc–Pokolfadomb<sup>362</sup> and

<sup>359</sup> *Gazdapusztai* (1959) Fig. 1, Pl. I. 1–3; *Kalicz* (1968) 78, 81, Fo. 10; *Kalicz-Schreiber* (1991) 12, Pl. 18. 3–6.

<sup>360</sup> E.g. Batrovci–Gradina, Ilok, Vinkovci: *Tasić* (1984) Taf. I. 4, Taf. IV. 3, 8.

<sup>361</sup> Even though the exact find circumstances could not be recorded at Tata (*V. Vadász–Vékony* [1969] 22; *Vékony* [1988]) it seems likely that the grave contained a scattered cremation (*Kalicz-Schreiber* [1991] 9, 11, Fig. 4. 1–7; *idem* [1994] 40, Abb. 13. 1–7) or a symbolic burial (*Kalicz* [1984a] 95) in view of the high number of intact vessels.

<sup>362</sup> The finds from Kajárpéc were initially assigned to the Somogyvár–Vinkovci culture (*Figler* [1994] 22–23, Abb. 10) with the cremation rite regarded as an indication of Makó–Kosihy–Čaka influence: *Bóna* (1992a) 13. *Kalicz-Schreiber* regarded the burial as a grave of the Makó–Kosihy–Čaka culture: *Kalicz-Schreiber* (1994) 40. Accepting her attribution, *Ruttkay* too listed the grave among the sites of the Makó–Kosihy–Čaka culture: *Ruttkay* (1995a).



Schwechat–Braueri<sup>363</sup> are also included here. A scattered cremation burial found at Moravská Nová Ves–Hrušky in Moravia has been assigned to the Makó–Kosihy–Čaka complex. The occasional scattered cremation burial appears in the northerly areas of the Great Hungarian Plain towards the end of the Makó–Kosihy–Čaka sequence (Kompolt–Kistér, Grave 2, and perhaps Jászdózsa–Kápolnahalom). The four graves uncovered at Berettyóújfalu–Nagy-Bócs in eastern Hungary were without exception scattered cremation burials, suggesting that this rite was practiced across the culture’s entire distribution.<sup>364</sup>

Sites	Number of burials	Rite of burials	Number of vessels	Type of vessels and other grave goods	Age and sex of the deceased	Settlement
21. Berettyóújfalu–Nagy-Bócs-dűlő	Grave 568/1316	scattered cremation	3	bowl and pot fragments	young female	+
	Grave 686/1597	scattered cremation (?)	not known	unpublished	–	+
	Grave 824/1889	scattered cremation	5–6 jugs	5–6 jugs, grind stone, stone tool, animal bone, burnt grain	–	+
	Grave 1922/4055	scattered cremation (?)	not known	vessels, animal bones	–	+
29. Békéscsaba–Alvégi-legelő, majorok	1	cremation (?)	2	jug and bowl	–	–
49. Budapest–Aranyhegyi Road	1	scattered cremation	12–13	interior decorated bowl, pot, anthropomorphic vessel, 2 bowls, 7–8 mugs	–	+

Fig. 14. Scattered cremation, mixed cremation, and cremation (?) burials of the Makó–Kosihy–Čaka culture

<sup>363</sup> The grave from Schwechat–Braueri, probably a scattered cremation burial, contained five vessels (two bowls, one handled pot, and two measuring cups “Messbecher”): *Ruttkay* (1995a); *idem* (1995b) 199, Abb. 32. 3–7. The grave was initially assigned to the Gáta–Wieselburg group owing to the presence of the one-handed measuring cups: *Pittioni* (1954) Abb. 225. Based on the grave goods from Kajárpéc, which she assigned to the Makó–Kosihy–Čaka culture, Ruttkay revised the cultural attribution of the Schwechat burial and assigned it to the Makó–Kosihy–Čaka culture: *Ruttkay* (1995a); *idem* (1995b). At the same time, Ruttkay’s attribution to the Makó–Kosihy–Čaka culture can be challenged on the grounds that the bowls, the jug and the small handled cups represent types more common in the Early Bronze Age 2, a period post-dating the Makó–Kosihy–Čaka culture. The grave can probably be interpreted as evidence for the contact between the late Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures. Some of the assemblages from the Little Hungarian Plain (e.g. Győrszemere–Tóth tag, Kajárpéc–Pokolfadomb, Rajka–Modrovich puszta and Táp–Borbapuszta) can likewise be assigned to the beginning of the Early Bronze Age 2. The small jug from Schwechat differs from the one-handed vessels of the Makó–Kosihy–Čaka culture, whose body is not sharply carinated, but remains curved (cp. MKČ Type X/4), while the flat bowls have their counterparts among the finds from Hódmezővásárhely–Gorzsa Cukor-tanya (*Kalicz-Schreiber* [1991] Fig. 18. 4) dating to the late Makó–Kosihy–Čaka period, and the assemblages of the Bell Beaker culture.

<sup>364</sup> A grave whose burial rite has been tentatively identified as cremation, and whose cultural attribution is uncertain must also be mentioned here: Békéscsaba–Alvégi legelő-majorok. Bóna assigned the burial to the Gyula–Roşia group based on the handled jug with cylindrical neck and a bowl found in the grave (*Bóna* [1992a] 15; *Pl. 1.* 2–3, in this volume) even though the group practiced inhumation. The grave is now assigned to the Makó–Kosihy–Čaka culture: *Németi–Dani* (2001) 116; *Kulcsár* (2002a); *Tóth* (2002) 36, note 22.



Sites	Number of burials	Rite of burials	Number of vessels	Type of vessels and other grave goods	Age and sex of the deceased	Settlement
53. Budapest–Budaörs Airfield	1	cremation?	not known	anthropomorphic vessel ?	–	+
58. Budapest–Rákoscsaba, Péceli Road	1	cremation	11	jugs, bowls, 2 interior decorated bowls	–	+
108. Felgyő–Tábitanya	1	cremation (?)	1	vessel fragment	–	+
136. Jászdózsa–Kápolnahalom	1	scattered cremation	1	jug, clay bead	–	–
137. Kajárpéc–Pokolfadomb	Grave 1	scattered cremation	9	bowl, mug, 6 handled cups	–	–
	Grave 3	scattered cremation	8	2 bowls, mug, jug, 5 handled cups	–	–
153. Kompolt–Kistér	Grave 2	scattered cremation	4	amphora-like vessel, interior decorated bowl, mug, jug, bone awl	–	+
185. Mosonszentmiklós–Pálmajor	4 (?) unpublished	cremation	not know	not know	not know	+
261. Tata–Tófarok	1	scattered cremation	10	7 mugs, 2 handled small vessel, interior decorated bowl	–	–
316. Čaka–Kopeč	Grave 5	mixed cremation	2	jug and bowl	–	+
	Grave 8	scattered cremation	4	jug, 2 mugs, interior decorated bowl	–	+
330. Ivanka pri Dunaji	1	mixed cremation	2	mug, interior decorated bowl	–	–
369. Šal’a	1	scattered cremation grave	1	amphora, copper plate	–	–
393. Schwechat–Braueri	1	cremation (?)	5	2 bowls, 2 cups, small handled pot	–	–
403. Moravská Nová Ves–Hrušky	1	scattered cremation	1	amphora	adult male	–

*Fig. 14 (cont'd)*

The grave pits of the scattered cremation graves generally measured 125–135 cm by 100–110 cm, although smaller grave pits have also been documented, for example at Jászdózsa–Kápolnahalom (55 cm by 35 cm). Most were rather shallow, with the depth ranging between 20 and 70 cm. Grave pits were round, oval or oblong in shape (Budapest–Aranyhegyi Road; Čaka–Kopeč, Grave 8; Moravská Nová Ves; Šal’a). The patch of the grave could not be observed at Kajárpéc; in the case of Grave 3, the area covered by the scattered ashes had a diameter of 2 m, marking the original



boundaries of the grave.<sup>365</sup> A unique, previously undocumented phenomenon was noted in Grave 2 of the Kompolt–Kistér site: four smaller pits, perhaps post-holes, were found in a symmetrical arrangement in the relatively shallow, 10–25 cm deep round grave pit with a diameter of 230 cm, which Gogáltan interpreted as the remains of a wooden funerary structure, perhaps a house of the dead “Totenhaus”.<sup>366</sup> Similar funerary structures have been reported from the Corded Ware, Bell Beaker and Proto-Aunjetitz cultures of Moravia.<sup>367</sup>

The position of the ashes and the grave pottery in the grave pit can be reconstructed in a few cases. The ashes were deposited either in the middle of the grave pit or in a small heap in one part, as at Budapest–Aranyhegyi Road and Kompolt (Grave 2), although sometime the ashes were in part deposited in a small heap and in part strewn over the entire pit (Čaka, Grave 8).<sup>368</sup> In some cases, the ashes lay beside the vessel in one part of the grave pit (Moravská Nová Ves–Hrušky) or among the vessels, without a visible concentration (Jászdózsa, Kajárpéc–Pokolfadomb, Šal’a). In graves containing several vessels, the ashes sometimes lay between the vessels set in the two ends of the grave pit (Čaka, Grave 8),<sup>369</sup> although in some graves the vessels were arranged in several smaller groups around the ashes (Budapest–Aranyhegyi Road),<sup>370</sup> or formed a group beside the ashes (Kompolt, Grave 2).<sup>371</sup> The handled cups and mugs from Grave 3 at Kajárpéc were in part placed into the bowl and in part beside it.<sup>372</sup> Very rarely, a few articles were placed in the vessels: a clay bead (?) and charcoal fragments in the jug at Jászdózsa, a copper plaque with perforated edge in the amphora from Šal’a. In a few instances, the vessels in the grave were already broken by the time they were deposited (Kajárpéc, Grave 3) or were intentionally smashed (Kompolt, Grave 2).<sup>373</sup>

The proportion of graves containing a single vessel (Jászdózsa, Moravská Nová Ves, Šal’a), graves with four or five vessels (Čaka–Kopce, Grave 8, Kompolt–Kistér, Grave 2, Schwechat–Brauerei) and graves with seven to eleven vessels (Budapest–Rákosszabás–Péceli Road, Kajárpéc–Pokolfadomb, Graves 1 and 3, Tata–Tófarok) is roughly the same among the scattered cremation burials (*Fig. 14*). In terms of the grave pottery, the grave containing some twelve (or perhaps thirteen) vessels found at Budapest–Aranyhegyi Road eclipses by far the other known burials (*Fig. 14, Site 49*). Such a high number of grave pottery has only been documented among scattered cremation burials. The rise in the number of grave goods can be linked to the appearance of small handled mugs and jugs, which were seldom deposited in inurned burials. In addition to interior decorated and other bowls, small handled pots and amphoras, handled cups, mugs and/or jugs were also placed in the graves: two at Kompolt, two at Schwechat, three at Čaka, seven in each burial at Kajárpéc and Tata–Tófarok, and eight (or nine) at Budapest–Aranyhegyi Road.

<sup>365</sup> Figler (1996a) 10.

<sup>366</sup> Gogáltan (1999a) 171, Fig. 23.

<sup>367</sup> Stuchlík–Stuchlíková (1996) 76–78, Figs 42–43.

<sup>368</sup> Charcoals pieces often lay among the ashes.

<sup>369</sup> Two cups and a jug lay in one heap, while an interior decorated bowl lay separately, slightly farther from the other vessels in the small, 125 cm by 100 cm large grave pit of Grave 8 at Čaka. While ashes were scattered over the entire floor of the grave pit, most lay between the vessels.

<sup>370</sup> The position of the grave goods could only be observed in the grave pit’s eastern half, where four vessels had been deposited. Another seven or eight vessels lay in the disturbed western half, cp. Kalicz–Schreiber (1994) 39–40, Abb. 2–3.

<sup>371</sup> Gogáltan (1999a) 66–67, Fig. 23. In addition to the vessels in the middle of the grave pit, the burial also contained a bone awl and vessel fragments scattered over the floor.

<sup>372</sup> Figler (1996a) 10. The drawings of the graves are still unpublished.

<sup>373</sup> Gogáltan (1999a) 171.



The low number of vessels accompanying the burial is a typical feature of inurned burials. Scattered cremation graves in which the single grave good is a larger vessel, an amphora or a pot (which in the case of inurned burials contained the ashes) are especially interesting in this respect. The burials from Šal'a and Moravská Nová Ves can be assigned to this category. The single grave good in the Moravian burial was an ovoid amphora with cylindrical neck.<sup>374</sup> The burial rite and the vessel from this grave differed markedly from the burials of the Moravian Bell Beaker and the Proto-Aunjetitz culture. The grave could not be unequivocally assigned to the Corded Ware culture, even though the analogies to the amphora do not exclude this attribution.<sup>375</sup> The burial rite, however, clearly has its parallels in the Makó-Kosihy-Čaka culture and the amphora was a fairly common type during the Early Bronze Age, known also from the culture's south-western Slovakian sites.<sup>376</sup> The burial from Šal'a raises similar problems. It contained an amphora-like vessel<sup>377</sup> into which a copper plaque with three perforations along its edge had been deposited.<sup>378</sup> Both finds have their best parallels among the grave goods of the late Corded Ware culture in Moravia. While the burial rite clearly differs from the inhumation traditionally practiced by the Moravian Corded Ware population, the grave goods suggest close ties between the two cultures. The cultural attribution of the two burials is difficult because both cultures were distributed in south-eastern Moravia: however, the chronology of the late Moravian Corded Ware culture and the Makó-Kosihy-Čaka groups relative to each other, and the nature of the interaction between them still remain to be clarified.<sup>379</sup>

Another group of scattered cremation burials can be linked to the cultural changes at the close of the Hungarian Early Bronze Age 2 and the final phase of the Makó-Kosihy-Čaka culture. The Early Bronze Age burial dug into the natural subsoil under the Jászdózsa-Kápolnahalom settlement mound

<sup>374</sup> The anthropological analysis of the ashes revealed that they were the remains of an adult male.

<sup>375</sup> The amphora has its counterparts among the grave pottery from burials of the Corded Ware burials in the Lower Traisen Valley (*Neugebauer-Neugebauer* [1992] Abb. 1. 10; Franzhausen, Graves 246 and 357; *Neugebauer-Neugebauer* [1997] Taf. 478. Verf. 246 and Taf. 505. Verf. 357); the ceramics of the Corded Ware culture of Moravia (e.g. Jiříkovice I, Grave 1 and Morkůvky I, Grave 1: *Šebela* [1999b] Pl. 27. 10, Pl. 61. 1, Pl. 180. 1; for the ornamented variety, cp. Pustiměř I, Grave 1: *Šebela* [1999b] Pl. 92. 1, Pl. 181. 4) and the inurned Bell Beaker burials from Bohemia and Moravia: *Moucha* (1981) Taf. 1. 11, Taf. 4. 1. Another characteristic feature of Corded Ware burials is the deposition of a larger urn in the grave (e.g. Slatinky I, Grave 2: *Šebela* [1999b] Pl. 97. 8, Pl. 183. 8).

<sup>376</sup> The pottery from the Čaka-Diely medzi lúkami settlement included both variants with a constricted neck (*Vladár* [1966] Abb. 14. 6, Abb. 14. 8) and a handleless variant: *Vladár* (1966) Abb. 13.

<sup>377</sup> *Vladár* noted the similarities with the amphoras of the Moravian Corded Ware culture and regarded the vessel as heralding the Pre-Aunjetitz phase in Bohemia and Moravia: *Vladár* (1966) 283–284. Other analogies are known from graves, e.g. Marefy, Grave IV/5: *Šebela* (1999b) Pl. 57. 9. A handled variant has been reported from Velešovice: *Dvořák-Šebela* (1992) Abb. 3. 15, 16. Ribs arranged in a concentric pattern appear on two jugs from Letonice, Grave 6: *Buchvaldek* (1978) Fig. 8. 7–8; *Šebela* (1999b) Pl. 44. 2, Pl. 47. 7, Pl. 184. 1, 7. Amphoras of this type occur in the inhumation burials of the Corded Ware groups in the Lower Traisen Valley, e.g. Franzhausen, Graves 246 and 357: *Neugebauer-Neugebauer* (1997) Taf. 478. Verf. 246, Taf. 505. Verf. 357.

<sup>378</sup> Analogies to the copper plaque can be quoted from the burials of the Moravian Corded Ware culture, for example from Vážany nad Litavou: *Vladár* (1966) 298; *Págo* (1967); *Vladár* (1967) 301–302; *Schalk* (1998) 82, Taf. 15. 3; *Šebela* (1999b) Pl. 115. 1. *Vladár* had earlier interpreted finds of this type as knives: *Vladár* (1966) 298; *idem* (1967) 298–302. Comparable fragment are known from Grave 7 at Krumvř (*Šebela* [1981a] Abb. 2. 9; *idem* [1999b] Pl. 35. 4) and the burials uncovered at Brno-Veveří ulica: *Šebela* (1981a) 185–186; *idem* (1999b) Pl. 3. 3, 10. A comparable piece has more recently been found at Modřice, Feature 7: *Matějčková* (1999) Obr. 3. 9.

<sup>379</sup> Cp. *Peška* (1989); *idem* (1997).



was earlier believed to mark a Makó–Kosihy–Čaka site.<sup>380</sup> The handled jug from the burial represents a vessel type which is not part of the Makó–Kosihy–Čaka culture's basic ceramic inventory. Several varieties of biconical handled jugs with a cylindrical neck can be quoted from the Early Bronze Age cultures of the Carpathian Basin. The pieces closest to the Jászdózsa vessel are to be found in Somogyvár–Vinkovci assemblages,<sup>381</sup> and comparable jugs are also known from Early Bronze Age 2 contexts in the Budapest area.<sup>382</sup> In addition to the Makó–Kosihy–Čaka culture, scattered cremation was a burial rite practiced also by the Budapest group of the Bell Beaker culture,<sup>383</sup> and the early and classical Nagyrév groups distributed in the Danube–Tisza Interfluve<sup>384</sup> and the Tisza region.<sup>385</sup> The grave from Jászdózsa can thus be assigned to the scattered cremation burials in the Makó–Kosihy–Čaka tradition, which provide evidence for the contemporaneity of the Transdanubian–Syrman Somogyvár–Vinkovci culture and the late Makó–Kosihy–Čaka culture in the Early Bronze Age 2.<sup>386</sup>

<sup>380</sup> Bóna (1992a) 22. The grave is first mentioned by Stanczik (*Stanczik* [1969] 170; *idem* [1988] 41–42), who had initially assigned the grave to the Nyírség culture: *Stanczik* (1982) 387. Cp. also *Dani–Kulcsár* (2000) for the full publication of the grave and its finds.

<sup>381</sup> E.g. Vinkovci: *Dimitrijević* (1982a) Abb. 5. 2; *Tasić* (1984) Taf. IV. 11; Somogyvár, Sármellék, Kemendollár, Pécsvárad, Ljubljana: Bóna (1965a) Pl. X. 8, Pl. XIV. 7, Pl. XVI. 10, 17, Pl. XVII. 4; Börzönce–Temetői-dűlő: *Bondár* (1995) Pl. 173. 348–349.

<sup>382</sup> Jugs of this type were found in both the inhumation and cremation burials of the Bell Beaker–Csepel group at Budapest–Békásmegyer: *Kalicz–Schreiber–Kalicz* (1999) Fig. 6. 6, Fig. 9. 10, Fig. 11. 6, Fig. 12. 5.

<sup>383</sup> In contrast to other regions of Central Europe (*Dvořák* [1993] 226, 532; *Neugebauer-Maresch* [1994a] 37, 38, 41, 44) the Bell Beaker groups in the Budapest area generally cremated their dead: *Kalicz–Schreiber* (1976a) 198; *idem* (1984b) 134; *Kalicz–Schreiber–Kalicz* (1997) 184. Of the 154 Early Bronze Age burials in the Budapest–Békásmegyer cemetery, 96 were inurned burials, 28 were scattered cremation burials, and only 30 were inhumation burials: *Kalicz–Schreiber–Kalicz* (1997) 336–337, 342, Abb. 4–7; *idem* (1999) 87–88. The tradition of cremation can be sought in the preceding Makó–Kosihy–Čaka culture: Bóna (1992a) 13; *Kalicz–Schreiber–Kalicz* (1997); *idem* (1999) 88.

<sup>384</sup> Thirteen of the sixteen graves in the small cemetery at Alsónémedi were scattered cremation burials; there were two mixed burials and two inurned ones: *Kalicz* (1957); *idem* (1958). Although scattered cremation burials generally contained three to six vessels, there was one grave into which a single jug had been deposited, similarly to the grave at Jászdózsa (Grave 9 contained a “Nagyrév” type handled jug: *Kalicz* [1957] 126, 130).

<sup>385</sup> Csányi has demonstrated that while all three burial rites were practiced in the early and classical Nagyrév culture, scattered cremation can be regarded as the dominant rite (e.g. at Nagyrév–Zsidóhalom, where twenty-seven burials were found, of which nineteen were scattered cremation burials, two were inurned burials and six were inhumation burials: Csányi [1982–83] 53, 55; *idem* [1992a] 84–85; *idem* [1999] 187). Scattered cremation burials generally had more grave goods. Few burials of the early and classical Nagyrév period are known along the Danube; the scattered cremation burial from Budapest–Budatétény and the inhumation burial from Budapest–Csepel can be mentioned in this respect: *Kalicz–Schreiber* (1984b) Taf. XLI; *Schreiber* (1986). Inurned burials became the norm in the culture's later phase, e.g. Kulcs, Szigetszentmiklós: Bóna (1960b); *Kalicz–Schreiber* (1995).

<sup>386</sup> Cp. *Dani–Kulcsár* (2000). For discussions of this issue, cp. *Kalicz–Schreiber* (1991) 13–14; *Gogáltna* (1999a) 173; *Kalicz–Schreiber–Kalicz* (1997) 335; *idem* (1999) 85–88; *Szathmári* (1999a) 144; *idem* (1999b) 76. Elements from the south appear not only in the burials, but also among the settlement finds, and occur both in the southerly regions of the Great Hungarian Plain, Battonya–Aradi Road (*G. Szénászký* [1987–88] 154, Fig. 5. 1) and in the Middle Tisza region, Tizsakürt–Homoki szőlő: Csányi (1996) 55–56, Pl. II. 4, Pl. XIV. 3.



The burials from Kompolt,<sup>387</sup> Budapest–Aranyhegyi Road,<sup>388</sup> Tata–Tófarok,<sup>389</sup> Kajárpéc–Pokolfadomb<sup>390</sup> and Čaka (Grave 8)<sup>391</sup> must certainly be mentioned here since in addition to typical Makó–Kosihy–Čaka wares,<sup>392</sup> the grave pottery include various handled jugs and mugs (*Fig. 19*), which were not part of the culture’s basic ceramic repertoire and can be regarded as southern types in view of their distribution frequencies. Interior decorated bowls, a hallmark of the Makó–Kosihy–Čaka culture, occur in all of these burials (with the exception of the ones at Kajárpéc).<sup>393</sup> The Kajárpéc burials differ from the other ones owing to the small handled cups deposited in them, whose best analogies can be quoted from Schwechat–Braueri.<sup>394</sup> The cultural attribution of the three graves is still debated and most scholars have repeatedly emphasized the difficulties posed by the period’s cultural complexity.<sup>395</sup> It would appear that burials containing Makó–Kosihy–Čaka type interior decorated bowls with a very simple design can be assigned to the Makó–Kosihy–Čaka culture, more specifically to the culture’s later phase.<sup>396</sup>

Scattered cremation burials, whose grave inventory often included ceramic types differing from the basic Makó–Kosihy–Čaka wares, were apparently more common in the culture’s western distribution. The non-local pottery types in question can in part be linked to the late Corded Ware culture of Moravia, and in part to the various phases and regional variants of the Somogyvár–Vinkovci culture. Their presence in the burials is an obvious reflection of the processes heralding the decline of the Makó–Kosihy–Čaka culture.

<sup>387</sup> Grave 2 (Feature 115): *Gogáltan* (1999a) Pl. 17. 5.

<sup>388</sup> Parallels to the small handled mug (*Kalicz-Schreiber* [1994] Abb. 2. 3) can be quoted from the Somogyvár–Vinkovci culture (e.g. from the burial uncovered at Rajka–Modrovich puszta: *Figler* [1994] Abb. 9. 3, 6), while pieces comparing well with one of the jugs (*Kalicz-Schreiber* [1994] Abb. 3. 4) are known from several sites in the Budapest area (e.g. Békásmegyer, Grave 131: *Kalicz-Schreiber* [1976a] Abb. 17. 131), the stray finds from the Vác–Téglagyár site (*Bóna* [1963] Pl. XIII. 3) and a recent assemblage of the early Nagyrév period from Kecskemét–Csukásér in the Danube–Tisza Interfluvium (vessels 2, 6, and 13: *Tóth* [1999] Fig. 3. 2, 8, Fig. 5. 3).

<sup>389</sup> *Kalicz-Schreiber* (1991) Fig. 4. 1–4.

<sup>390</sup> *Figler* (1994) Abb. 10. 1, 9; *idem* (1996a) 10, 17, Pl. III. 4.

<sup>391</sup> *Točík–Paulík* (1960) Taf. I. 4–6.

<sup>392</sup> Biconical bowls, of both the handled (*Figler* [1994] Abb. 10. 5, 8; *Kalicz-Schreiber* [1994] Abb. 3. 1) and plain variety (*Kalicz-Schreiber* [1994] Abb. 33. 2), interior decorated bowls (*Točík–Paulík* [1960] Taf. I. 7; *Kalicz-Schreiber* [1991] Fig. 4. 7; *idem* [1994] Abb. 2. 2; *Gogáltan* [1999a] Pl. 17. 3), small handled mugs (*Gogáltan* [1999a] Pl. 17. 4), small handled pots (*Kalicz-Schreiber* [1991] Fig. 4. 5–6) and amphoras (*Gogáltan* [1999a] Pl. 17. 8).

<sup>393</sup> The proportion of interior decorated bowls among the grave goods is higher in scattered cremation burials. They occur in most of the known symbolic burials (in three out of seven), but were not among the typical grave goods placed in inurned burials (five out of thirty-eight). It must also be noted that in spite of their wide distribution, they appear mostly in the grave inventories of Makó–Kosihy–Čaka burials. For the possible ritual role of interior decorated bowls, cp. *Kalicz-Schreiber* (1994) 40.

<sup>394</sup> *Figler* (1994) Abb. 10. 2–4, 6–7; *idem* (1996a) Pl. III. 2, 5–8. Cp. *Ruttikay* (1995a) Abb. 2. 1–2.

<sup>395</sup> The burials from Kajárpéc have been variously assigned to the Somogyvár–Vinkovci culture (*Figler* [1994] 22–23; *idem* [1996a] 10) and the Makó–Kosihy–Čaka culture: *Kalicz-Schreiber* (1991) 10; *idem* (1994) 40; *Ruttikay* (1995a) 354; *Kalicz-Schreiber–Kalicz* (1999) 88; *Kulcsár* (1999a) 122, note 18. The burial from Schwechat–Braueri has been assigned to the Makó–Kosihy–Čaka complex based on the similarities between its grave goods and the finds from Kajárpéc: *Ruttikay* (1995a).

<sup>396</sup> The presence of a rather poor imitation of these bowls in some Moravian Corded Ware burials (for example from Tovačov I, Grave 2: *Šebela* [1993] Fig. 126. 6; *idem* [1999b] Pl. 110. 1; and Modřice, Feature 7: *Matějíčková* [1999]) can perhaps be explained by the contacts between the two cultures. A comparable vessel was found in the Bell Beaker burial at Brno–Holásky II, Grave 61/38: *Dvořák* (1992) 15, Taf. 26/B3.



Symbolic burials

Symbolic burials, occurring sporadically in the Makó–Kosihy–Čaka distribution, can be regarded as a special variant of scattered cremation burials (*Fig. 12, Fig. 15*). While it is possible that the ashes were simply overlooked, these graves can equally well be interpreted as a funerary sacrifices or secondary burials (Biatorbágy–Tyúkberek, Hódmezővásárhely–Gorzsa-Kovács-tanya, Makó–Vöröskereszt, Tatabánya–Dózsakert, Mušov),<sup>397</sup> or perhaps as vessel deposits (Nemesvámos [?]) representing the remains of some sort of ritual.<sup>398</sup> The pottery from these graves is generally made up of two to six intact vessels. In contrast, only a few pottery sherds were recovered from the two features lying some 50 m apart, both of which were enclosed within a ring of stones and covered with stones at Krásno–Kráčiny in Slovakia, a site on the northern fringes of the Makó–Kosihy–Čaka distribution, suggesting that they had perhaps been burials.<sup>399</sup>

Sites	Number of burials	Number of vessels	Type of vessels and other grave goods	Settlement
42. Biatorbágy–Tyúkberek and Törökbálint–Kukoricadűlő	1 (?)	2	pot, bowl	+
128. Hódmezővásárhely–Gorzsa-Kovács István-tanya	1	3	interior decorated bowl, pot, bowl	–
171. Makó–Vöröskereszt	1	6	interior decorated bowl, bowl, flask shaped vessel, 2 one-handled pots, pot	+
263. Tatabánya–Dózsakert	1	2	pot, small pot	+
338. Krásno–Kráčiny	Grave 1	? (fragments)	body sherd with brushed decoration, fragment of an interior decorated bowl	–
	Grave 2	–	–	–
405. Mušov–U Sv. Jana	1	2	pot, bowl	+

Fig. 15. Symbolic graves of the Makó–Kosihy–Čaka culture

The number of burials was undoubtedly higher than the archaeological record would suggest. It seems likely that some of the stray intact vessels came from burials (*Fig. 17*). Most of these vessels are interior decorated footed bowls, although they include a few intact amphoras, vessels with asymmetrical handles, askos, jugs and mugs too.

Makó–Kosihy–Čaka burials rarely contain costume articles or tools and implements. The few exceptions include the bone awl from Kompolt (Grave 2),<sup>400</sup> a necklace strung of animal teeth from Valea lui Mihai, and a clay bead from Jászdózsa–Kápolnahalom. Few metal articles have been

<sup>397</sup> The composition of the grave pottery, and especially the presence of the pot and the amphora, corresponds to the grave pottery composition from the known cremation burials (cp. also Grave 53 of the Kál–Legelő cemetery). Grave offerings are also assumed in the Somogyvár–Vinkovci culture: *Bóna* (1972) 6.

<sup>398</sup> Five fragmentary bowls came to light at Nemesvámos, whose find circumstances can no longer be reconstructed. However, the possibility of a vessel hoard cannot be excluded in view of the more or less identical nature of the interior decorated bowls. A similar interpretation has been suggested for the assemblage from Makó–Vöröskereszt: *Stapel* (1999) 293.

<sup>399</sup> The finds included fragments of interior decorated bowls. It has been suggested that the vessels had been crushed by the stones: *Vladár* (1966) 267–268, Abb. 29. According to Zoja Benkovsky-Pivovárová, the interpretation of the assemblage as a grave finds can be seriously challenged: *Benkovsky-Pivovárová* (2007) 136.

<sup>400</sup> A bone awl or chisel made from cattle bone: *Gogáľtan* (1999a) 174, Pl. 17. 7.



recovered from burials: a copper plaque from Šal'a and a broken metal pin from Magyarcsanád–Bökény. In some cases, burnt and splintered animal bones were found among the human ashes,<sup>401</sup> probably the remains of a food offering or animal sacrifice placed beside the deceased on the funerary pyre.

### *Inhumation burials*

The (crouched) inhumation burials (*Fig. 16*),<sup>402</sup> which can be assigned to the category of solitary burials,<sup>403</sup> are predominantly known from the regions east of the Danube (Budapest–Szentmihályi Road, Nagyhegyes–Elep 25, Tarnazsadány, Tiszacsege).<sup>404</sup> One such burial, with the deceased laid extended on the back, has been reported from Ivanka pri Nitre in south-western Slovakia. The composition of the grave pottery has a regular pattern, usually made up of a vessel with asymmetrical handles as at Budapest–Szentmihályi Road and Tarnazsadány, and the occasional small jug, as at Ivanka pri Nitre. The cultural attribution of the solitary inhumation burials with a jug from Nagyhegyes–Elep 25 and Tiszacsege is uncertain.<sup>405</sup> It had earlier been suggested that the

<sup>401</sup> The two burials uncovered at Kompolt both contained animal bones. Grave 1 (Feature 8) yielded cattle and pig bones, while Grave 2 (Feature 115) yielded calcinated sheep/goat and wild boar bones in addition to the bone awl: *Bartosiewicz* (1999) 281, 297. Another burial containing meat offerings was found at Berettyóújfalu–Nagy-Bócs (*Fig. 14, Site 21*). Animal bones have also been found in urns containing human ashes, for example at Gáborján–Csapszékpart (*Szathmáry* [1981] 41) and Debrecen–Köntöskert: *Németi–Dani* (2001) 103.

<sup>402</sup> The infant skeleton uncovered in a pit of the Csongrád–Sertéstelep (72) settlement can hardly be seen as a traditional burial.

<sup>403</sup> Richard Pittioni mentions a burial from the Wien 21–Leopoldau site, which he interpreted as a solitary burial (“Einzelgrabkultur”; *Pittioni* [1954] Abb. 166). The contracted inhumation burial was later assigned to the Kosihy–Čaka/Makó complex (*Moucha* [1981] 115, note 9; *Hahnel* [1992] 86, note 32), although *Ruttkay* has challenged this cultural attribution owing to the inhumation rite: *Ruttkay* (1995b) 196. This burial can most likely be regarded as a grave of the Corded Ware culture in view of its burial rite and the amphora type. In addition to the culture’s Moravian distribution, the presence of Corded Ware groups can also be assumed in the Lower Traisen Valley in Lower Austria, as shown by Graves 34, 117, 244, 246, 351, 352, 354, 357, 358, 522, 548 and 585 of the Franzhausen I cemetery (*Neugebauer–Neugebauer* [1997] 21), even though the amphoras from the burials represent the variant with cylindrical neck and ovoid body. However, the attribution of the grave at Wien 21–Leopoldau to the Makó–Kosihy–Čaka culture cannot be rejected out of hand since amphora shaped vessels resembling the ones of the Corded Ware culture are known from south-western Slovakia (the Šal'a burial).

<sup>404</sup> The inhumation burials uncovered at Sárrétudvari–Órhalom, some of which can be dated to the Makó–Kosihy–Čaka period, are yet another reflection of the cultural diversity of the Early Bronze Age 1–2: *M. Nepper* (1991); *Ecsedy* (1994b) 40; *Lichardus–Vladár* (1996) 31; *Kalicz* (1998b) 174; *Dani–M. Nepper* (2006).

<sup>405</sup> Cp. the crouched inhumation burials without grave goods found near burials of the Makó–Kosihy–Čaka culture, such as the one from Pişcolt (*Németi* [1996] 36) the stray finds include a jug: *Németi* (1996) *Fig. 7. 8*. Similar burials have also been reported from nearby Makó–Kosihy–Čaka settlements, e.g. Hódmezővásárhely–Barci-rét: *Somogyvári* (1979); *Kulcsár* (1997) 16. The possible connection between these burials and the Makó–Kosihy–Čaka cemeteries and settlements near them is unclear owing to the lack of grave goods and radiocarbon dates from the site.



appearance of the inhumation rite perhaps reflected the arrival of a new population<sup>406</sup> during the Early Bronze Age 2, a period characterised by strong cultural impacts from the south.<sup>407</sup>

Sites	Number of vessels	Type of vessels and other grave goods	Age and sex of the deceased	Settlement
57. Budapest–Szentmihályi Road	1	vessel with asymmetrical handles	–	–
72. Csongrád–Sertéstelep	–	–	infant	in a settlement pit
187. Nagyhegyes–Elep 25	1	jug	–	–
260. Tarnazsadány	1	vessel with asymmetrical handles	–	–
273. Tiszacsege	1	jug	–	–
331. Ivanka pri Nitre	2	small jug, vessel with asymmetrical handles	–	–

Fig. 16. Inhumation graves of the Makó–Kosihy–Čaka culture

### The cultural attribution and chronology of the burials

The cultural attribution of some burials assigned to the Makó–Kosihy–Čaka group has been challenged owing to the “alien” pottery forms (handled jugs, small mugs, cups, vessels with asymmetrical handles and amphoras) and the “alien” burial rite (inhumation). Knowing that the grave goods placed in a burial often had a symbolic meaning in addition to a community’s shared cultural preferences and practical considerations, a future detailed study on the custom of depositing artefacts alien to the Makó–Kosihy–Čaka culture in burials will undoubtedly shed new light on this period.

There is a consensus that these burials can be dated to the turn of the Early Bronze Age 1–2 or the onset of the Early Bronze Age 2.<sup>408</sup> Kalicz-Schreiber assigned the inhumation burials yielding vessels with asymmetrical handles from Budapest–Szentmihályi Road, Tarnazsadány and Ivanka pri Nitre to the early Nagyrév period and invoked a south to north migration/diffusion for their appearance.<sup>409</sup> Cultural impacts from the south can be assumed in the case of cremation burials yielding small handled mugs, cups and vessels with asymmetrical handles too. The Somogyvár–Vinkovci groups appearing in southern Transdanubia during the Early Bronze Age 1 gradually advanced northward, and there is reliable evidence for their settlement in the Little Hungarian Plain.<sup>410</sup> Although the nature

<sup>406</sup> The inhumation burials assigned to the Makó–Kosihy–Čaka culture include the graves from Budapest–Szentmihályi Road and Tarnazsadány, as well as the graves from Hódmezővásárhely–Kotacpart, Vata-tanya and Kökénydomb (the burials from the Hódmezővásárhely area were later assigned to the Nagyrév culture; Kalicz [1968] 82). The graves found at Debrecen/Nagyhegyes–Elep 25 and Tiszacsege were assigned to the late Nyírség culture: Kalicz (1968) 74.

<sup>407</sup> Kalicz (1984a) 95–96; Kalicz-Schreiber (1991) 12–14. Contact with the Eastern European region is evidenced by the grave goods from the burial uncovered at Tarnazsadány, which are best matched by the finds from Sofievka in the Dnieper region: Rassamakin–Nikolova (2008).

<sup>408</sup> Kalicz-Schreiber (1991) 13; Bóna (1992a) 13; Kalicz-Schreiber–Kalicz (1999) 85.

<sup>409</sup> Kalicz-Schreiber (1991) 13. A vessel with asymmetrical handles is known from one of the Bell Beaker sites in the Budapest area: Endrődi (1992) Fig. 15. The vessel is an excellent illustration of how various forms and decorations of Early Bronze Age pottery were creatively blended, and it can be regarded as a reflection of the period’s ethnic/cultural dynamics.

<sup>410</sup> Figler (1994); *idem* (1996a).



of their contact and interaction with the local Makó–Kosihy–Čaka communities is not known, the pottery from the settlements and the burials share several common traits (shown by the cups and small mugs from Budapest–Aranyhegyi Road, Kajárpéc–Pokolfadomb, Lábatlan, Tata–Tófarok and Schwechat–Brauerei). The stray finds from northern Transdanubia, such as the ones from Esztergom (Fig. 17, Sites 100, 102) and Környe (Fig. 17, Site 159), suggest that the range of their cultural contacts extended as far as the Danube Bend.

Sites	Type of vessels
2. Abony–33 Alkotás Street	jug
76. Debrecen–Bellegelő 266	interior decorated bowl
77. Debrecen–Bellegelő–Józsa	mug
78. Debrecen–Köntöskert, 22 Bezerédj Street	flask shaped vessel
79. Debrecen–Szövetkezeti szőlőtelep	interior decorated bowl
86. Dunaszentpál–Bolgányi Road gravel pit	interior decorated bowl
89. Eger–Szarvaskő	mug
100. Esztergom–Szentkirály I	urn, mugs
102. Esztergom–Római Tábor area	jug
115. Gelej–Kanálisdűlő	mug
120. County Hajdú	interior decorated bowl
145. Kecskemét–Szikra	interior decorated bowl
147. Kiskunhalas–collection of the Reformed Gymnasium	interior decorated bowl
157. Kömlő	mug
159. Környe	mug
163. Kunszentmárton (between Kunszentmárton and Szentes)	vessel with asymmetrical handles
193. Nemesvámos–Kasza-dűlő	3 (5) interior decorated bowls
220. Pusztaszer–Felsőpusztaszer A	interior decorated bowl
221. Rákóczi falva	amphora
233. County Szabolcs	2 undecorated footed bowls, amphora
235. Szarvas–Bolza kastély	interior decorated bowl, 2 mugs
238. Szarvas	amphora
249. Szentes–Jaksorpart	interior decorated bowl, jug fragment
251. Szentes–Orosháza	vessel with asymmetrical handles
301. County Veszprém	mug, small one-handled pot
357. Nitra–Dolné Krškany-6 Látečková Street	2 small jugs and 1 pot (?)
419. Periam	interior decorated bowl
426. Čoka–Kremenyák	interior decorated bowl
427. Rabe–Ankasziget	askoi

Fig. 17. Finds of one or more intact vessels

A few burials assigned to the Kosihy–Čaka culture north of the Danube all exhibit traits uncommon to the culture, both as regards the burial rite (inhumation) and the pottery types (handled jugs, vessels with asymmetrical handles).<sup>411</sup> A similar phenomenon has not been noted in the settlement assemblages. The handled jug from the inhumation burial uncovered at Ivanka pri Nitre<sup>412</sup> has good analogies among the pieces appearing in the Vučedol C period in southern

<sup>411</sup> Bóna quoted the burials containing Somogyvár–Vinkovci vessels from southern Slovakia in his arguments for rejecting a uniform Kosihy–Čaka culture: Bóna (1992a) 13. For another perspective on the connections between the Moravian Corded Ware and Makó–Kosihy–Čaka culture, cp. Benkovský-Pivovárová (2007).

<sup>412</sup> Kalicz-Schreiber described this burial as grave which cannot be attributed to one particular culture: Kalicz-Schreiber (1991) 13. Cp. Benkovský-Pivovárová (2004).



Transdanubia,<sup>413</sup> although the best parallels can be quoted from the southern Transdanubian and the Syrmian distribution of the Somogyvár–Vinkovci culture,<sup>414</sup> and the biconical jug with cylindrical neck and asymmetrical handles too is best matched by pieces from the south. The cremation burials from Čaka too betray “alien” traits. The vessel containing the ashes in Grave 5 echoes the form of jugs with asymmetrical handles.<sup>415</sup> The best parallels to the two handled mugs found beside an interior decorated bowl and a jug in Grave 8, a scattered cremation burial, can be quoted from the Rudina type in north-eastern Croatia<sup>416</sup> and the Somogyvár–Vinkovci culture.<sup>417</sup> The cultural attribution of the scattered cremation burial from Šaľa to the Makó–Kosihy–Čaka culture is uncertain since the amphora deposited in the grave is a type appearing in the contemporary Corded Ware culture of Moravia and the best analogies to the copper plaque too can be quoted from that culture.

The scattered cremation burial uncovered at Kompolt–Kistér, Grave 2 (153) contained typical Makó–Kosihy–Čaka wares (a small handled cup and an interior decorated bowl) accompanied by a handled jug with curved neck, a type alien to the Makó–Kosihy–Čaka culture. Although the form of the urn and the slender rib decorating it have their parallels among the pottery finds of the late Corded Ware period in Moravia and Bohemia, the burial can nonetheless be assigned to the eventful period starting (or perhaps culminating) at the onset of the Early Bronze Age 2. Another good record of this period is provided by the scattered cremation burial dug into the natural subsoil under the Jászdózsa (136) settlement mound.

The asymmetrical jug from the inurned burial at Hódmezővásárhely–Gorzsa–Cukor-tanya (127) can also be assigned to the late Makó–Kosihy–Čaka phase. According to the preliminary report, the burial uncovered at Kunpeszér–Sinai-hegy (162) in the Danube–Tisza Interfluve yielded two interior decorated bowls and a flask in addition to the urn. The flask resembles similar vessels of the Somogyvár–Vinkovci culture and is thus a record of contact between the two cultures.

In sum, we may say that cremation was the dominant rite in the Makó–Kosihy–Čaka culture and the Carpathian Basin at the beginning of the Early Bronze Age. It would appear that inurned cremation was the traditional Makó–Kosihy–Čaka rite, a practice which can be noted during the culture’s entire sequence. The scattered cremation burials and the occasional inhumation graves can be regarded as archaeological imprints of the vibrant cultural kaleidoscope coloured by “alien” elements of the Early Bronze Age 2.

Cremation was a rite practiced by the partly contemporaneous and partly later Nyírség culture, and it has also been documented in the Somogyvár–Vinkovci distribution, in the Budapest group of the Bell Beaker culture and in the early and classical Nagyrév period. The cultural tradition of cremation proved to be more deeply rooted at the turn of the Early Bronze Age 2–3, and it can therefore be regarded as the single tangible legacy of the Makó–Kosihy–Čaka culture.

<sup>413</sup> Lánycsók, Pit 3: *Ecsedy* (1980) Pl. I. 15. Ecsedy assigned the handled jug from Ivanka pri Nitre to the type which can be derived from the Vučedol culture: *Ecsedy* (1980) 97.

<sup>414</sup> Cp. the ornamented variant from Szava: *Ecsedy* (1979a) Taf. I. 4; and the undecorated piece from Batrovci: *Tasić* (1984) Taf. III. 1.

<sup>415</sup> *Vladár* (1966) Abb. 25. Cp. the piece from Ilok with slightly less rounded shoulders: *Tasić* (1984) Taf. I. 4, and the one from Batrovci: *ibidem* (1984) Taf. IV. 8.

<sup>416</sup> *Vladár* (1966) Abb. 26. Cp. Koprivnička Rijeka: *Marković* (1981) Pl. 12. 1, with the handle springing from the rim.

<sup>417</sup> *Dimitrijević* (1956a) Tab. III. 21. It also shares formal similarities with the handled mugs of the Corded Ware culture, which are believed to originate from the south, such as the “Nagyréver Krug” from Pavlov: *Dvořák–Šebela* (1992) Abb. 4. 9.



## Pottery and other artefacts of the Makó–Kosihy–Čaka culture

### Pottery

The first detailed typology of the Makó–Kosihy–Čaka culture was created by Kalicz for the culture's Hungarian distribution,<sup>418</sup> by Vladár for Slovakia<sup>419</sup> and by Ruttkay for Lower Austria.<sup>420</sup> These established typological schemes became generally accepted and were continuously supplemented by the variants appearing in assemblages from new sites. A more recent typological analysis based on fresh find assemblages has been published by Csányi and Szathmári.<sup>421</sup>

In her discussion of the finds from the southern part of the Great Hungarian Plain, Tóth also described regional variations,<sup>422</sup> demonstrating subtle differences between the culture's eastern and western distribution regarding the rim and neck form of pots and certain bowl types. Dani has successfully identified the typical traits of early Makó–Kosihy–Čaka pottery in the north-easterly regions.<sup>423</sup> Dieter Vollmann made an important contribution to Early Bronze Age pottery studies in the Carpathian Basin.<sup>424</sup> Supplementing the above studies are the countless new sites investigated during the past decades whose finds will undoubtedly modify the current picture of the Makó–Kosihy–Čaka artefactual material: the new vessels types and their variants, the regional differences and possible connections between these variants will add many new hues. The following typological scheme is based on the assemblages published up to the turn of the millennium in the hope that it will serve as a useful starting point for future studies.

The general traits of Makó–Kosihy–Čaka pottery, including regional variants, can be described as follows.

#### Fabric

Vessels were generally tempered with sand and mica, as well as with crushed pebbles and, more rarely, with coarsely crushed pebbles. Crushed pottery was sometimes also used as a tempering agent. There is no indication that only certain tempers were used in certain regions or for the manufacture of a particular ware. The grave pottery from Kál–Legelő, for example, included fine wares tempered with both main tempering agents.

#### Surface treatment

Fine wares and household pottery were both matte and smoothed. Fine wares (mugs, jugs, small handled pots and certain bowl types) were rarely polished. However, some handled pots fired to a black colour were sometimes polished to a shiny lustre.

Coarse wares (bowls, pots, amphoras) generally have two types of surface treatment. The neck of the vessel is smoothed and occasionally polished down to the shoulder, while the vessel body is

<sup>418</sup> In addition to eight main basic types (Types 1–8), Kalicz distinguished twelve other less frequent types (Types 9–20): *Kalicz* (1968) 82–84, Taf. CXXVI; *idem* (1984a) 96–98.

<sup>419</sup> Vladár divided the pottery of the Kosihy–Čaka group into seven main types: *Vladár* (1966) 272–298, Abb. 31.

<sup>420</sup> Ruttkay distinguished seven main ceramic types: *Ruttkay* (1982) 144–145, Abb. 69; *idem* (1995b) 196, 198.

<sup>421</sup> *Csányi* (1996); *Szathmári* (1999a); *idem* (1999b).

<sup>422</sup> *Tóth* (2001b).

<sup>423</sup> *Dani* (2005c).

<sup>424</sup> *Vollmann* (2005).



rusticated with light scoring or light or rough brushing, or the rough smoothing of the surface onto which a clay paste was splashed. This type of roughening was applied to some bowls too. Some vessels of this type were decorated with combed patterns in combination with roughening. Surface treatment of this type, generally applied during the Early Bronze Age 1–2 in the Carpathian Basin, has good analogies in the late Vučedol culture, the neighbouring Somogyvár–Vinkovci culture, the Glina III (IV)–Schneckenberg group distributed in Transylvania and Wallachia, in various smaller cultures of Transylvania (Livezile, Șoimuș, Iernut and Jigodin groups), in the Nyírség culture and in the Corded Ware culture of Moravia.

### Colour

Most vessels were fired to darker hues of greyish-brown, brown and brownish-grey, although reddish-brown and yellowish-brown vessels too occur infrequently.

### Vessel forms and types

The ceramic inventory of the Makó–Kosihy–Čaka culture includes certain forms and decorative elements appearing across the entire distribution alongside their regional variants. In many cases, a particular variant is represented by a single vessel only, resulting in a perhaps far too detailed typology for some vessel types. In other cases, a simplification was necessary and a disregard for describing the different variants essentially reflecting size variations.<sup>425</sup>

Several pottery types from the Makó–Kosihy–Čaka distribution cannot be decisively classified among the basic ceramic forms. These include certain jug and amphora types and vessels with asymmetrical handles, whose majority came to light from burials, although a few were also recovered from settlements. These vessels share numerous similarities with the pottery of the late Vučedol and Somogyvár–Vinkovci complex in the south, as well as with the Corded Ware culture of Moravia. While these vessels can be regarded as imports or as a reflection of the great degree of similarity between pottery wares, a trait characterising this period, their occurrence can equally well be regarded as an expression of population movements. The variants of the same vessel types appearing in different cultural contexts over extensive areas preserve the imprints of an interaction between diverse communication zones.

The following overview seeks to present the main types and their variants.

### *I. Jugs and mugs (Figs 18–19)*

One-handled small vessels with a height ranging between 4 and 10 cm can be assigned to the category of mugs in view of their size.<sup>426</sup> The taller jugs of the Makó–Kosihy–Čaka culture share typological affinities with comparable vessels of the Somogyvár–Vinkovci culture and cannot be unambiguously regarded as one of the culture's basic pottery forms (*Fig. 19*).

The vessels classified as mugs were discussed among the mugs, handled jugs and askoi by Vladár and Kalicz.<sup>427</sup> One interesting aspect of early typological schemes is that some of the handled jugs earlier categorised as Makó–Kosihy–Čaka pieces were later assigned to the Nagyrév culture.<sup>428</sup>

<sup>425</sup> Based on the data presented in the publications.

<sup>426</sup> Distributed principally in the westerly regions, vessels of Type X/4, here described among the one-handled small pots, share many resemblance with mugs.

<sup>427</sup> Vladár (1966) 274–278, Abb. 31; Kalicz (1968) 82–83, Taf. CXXVI.

<sup>428</sup> The finds from Hearth 1 uncovered at Hódmezővásárhely–Kökénydomb were not assigned to the Nagyrév culture initially: Bóna (1963); Kalicz (1968) 83. The site was first listed among the early Nagyrév sites



Several variants can be distinguished within the main mug types. The basic form is the mug with slightly flaring neck, rounded shoulder and squat biconical body (Types I/1–2) and similar forms with slightly more elongated neck (Types I/3–7), as well as mugs with more slender body (Types I/8–10). Rarer types include biconical pieces with elongated flaring neck and the rounded specimens from the Čaka burials (Types I/12b–12c). Another infrequent form is a wide-mouthed handled mug type (Types I/13–14) occurring in the north-western Makó–Kosihy–Čaka territories, whose best parallels can be quoted from the Moravian Corded Ware culture. A few unparalleled pieces are also assigned to the mugs owing to their small size (Type I/15).

Mugs were rarely decorated and the few that are mostly have ribs set on the body. Some pieces were adorned with a triple rib (Type I/1), a wavy cordon (Type I/14) or a longer triple rib (Type I/11) or, occasionally, a moustache rib (Type I/10) below the handle. Handled mugs have been recovered from both settlements and burials.

#### *Types I/1–7 (Fig. 18)*

##### Type I/1

Small biconical handled mug with low cylindrical neck (H. 3–4 cm). No intact piece is known. Some pieces are decorated with three pairs of vertical ribs.<sup>429</sup>

##### Type I/2

Handled mug with flaring neck and globular body (H. 8.5 cm). A stray find of this vessel type is known from Debrecen–Bellegelő–Józsa.<sup>430</sup>

##### Type I/3

Small handled mug with tall, curved neck and biconical body (H. 4–5 cm). Kalicz had earlier assigned the stray piece from Gelej to the Nyírség culture. However, an attribution to the Makó–Kosihy–Čaka culture is equally feasible.<sup>431</sup>

##### Type I/4

Biconical mug with tall, curved neck (H. 7 cm), a rare type in the Makó–Kosihy–Čaka culture. The proportions of the mug found in the inurned burial at Hódmezővásárhely–Gorzsa–Cukor-tanya<sup>432</sup> resembles the similar mugs of the Somogyvár–Vinkovci culture from southern Transdanubia and the mugs from the southern areas of the Danube–Tisza Interfluvium which had earlier been assigned to the Ada group (and now

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much later: Csányi (1982–83) 55; Kalicz (1984a) 97. The conical bowl decorated with a lime-encrusted design (*Gazdapusztai* [1957] Fig. 1, Pl. XIX. 5) was earlier assigned to the Makó culture: Kalicz (1968) 83, Taf. CXXVI. 12. It was later established that the bowl represents a widespread type in the Nagyrév culture, e.g. Rákóczi-falva–Kastélydomb, Grave 11: Csányi (1982–83) Fig. 3. 4, while its decoration reflects a familiarity with and an adoption of the decorative techniques and stylistic elements of the Nyírség culture, cp. Szolnok–Szőlőshalom: Bóna (1963) Pl. V. 4a–b; Tószeg–Laposhalom: Schreiber (1984b) Fig. 6. 5; Csányi–Tárnoki (1992) Kat. Nr. 390; Nagyrév–Zsidóhalom: Csányi (1992a) Abb. 50, Kat. Nr. 385.

<sup>429</sup> Tarnabod–Berekalja: Kalicz (1998a) Fig. 9. 3; fragment: *ibidem* Fig. 8. 1. For a similar neck fragment from Kömlő–Szövetkezeti földek, cp. Pl. 4. 5, in this volume.

<sup>430</sup> Kalicz (1968) Taf. XII. 6.

<sup>431</sup> *Ibidem* Taf. XXVII. 11. Cp. also Kalicz (1998a) 11.

<sup>432</sup> *Gazdapusztai* (1959) Pl. I. 3; Kalicz–Schreiber (1991) Fig. 18. 3.



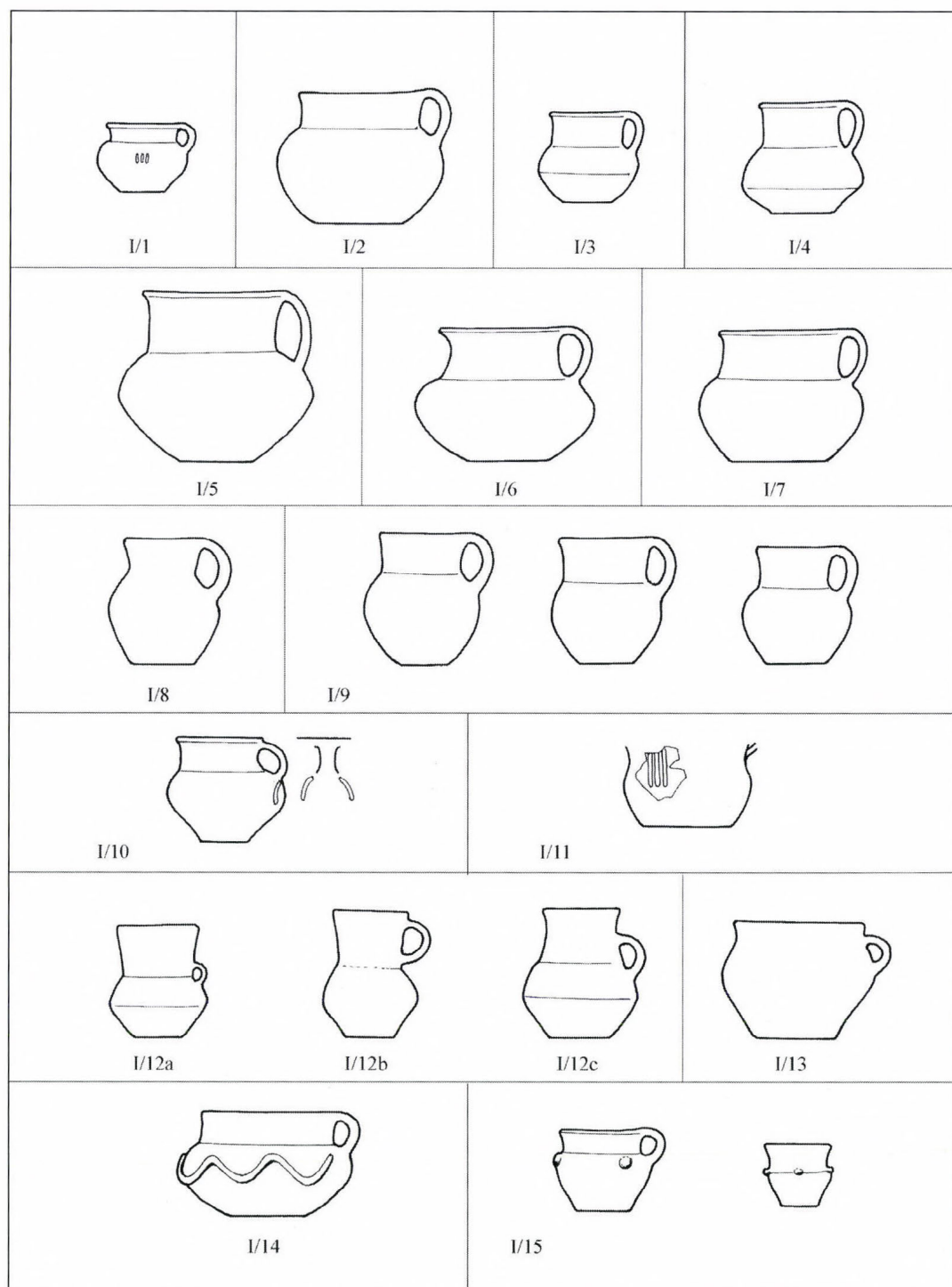


Fig. 18. Vessel types of the Makó–Kosihy–Čaka culture. Types I/1–15: mugs

Type I/1: Tarnabod–Berekalja, I/2: Debrecen–Bellegelő–Józsa, I/3: Gelej, I/4: Hódmezővásárhely–Gorzsa, Cukor-tanya, I/5: Boldog–Vasútállomás, I/6: Hódmezővásárhely–Solt-Palé, Égető Bálint-tanya, I/7: Hódmezővásárhely–Szakálhát, Diószegi Imre földje, I/8: Kompolt–Kistér, I/9: Kömlő, Tiszalúc–Sarkadpuszta, I/10: Tiszalúc–Sarkadpuszta, I/11: Kömlő, I/12a: County Veszprém, I/12b–c: Čaka–Kopec, Grave 8, I/13: Malé Kosihy–Törökdomb, I/14: Nové Zámky, I/15: Hódmezővásárhely–Solt-Palé, Égető Bálint-tanya, Hódmezővásárhely–Szakálhát, Diószegi Imre földje

H. 4–18.6 cm



to the Somogyvár–Ada group).<sup>433</sup> The other vessel in the Gorzsa burial, a jug with asymmetrical handles, too reflects cultural connections with the south.

#### Type I/5

Larger biconical mug/jug with cylindrical neck and wide strap handle (H. ca. 11 cm).<sup>434</sup> This form is uncommon in the Makó–Kosihy–Čaka inventory, occurring only among the culture's stray finds. The wide strap handle is more typical for the jugs and mugs of the Somogyvár–Vinkovci culture. Comparable, slightly taller jug-like pieces (H. 16–18.6 cm) have been recovered from Pit 3637 of the Üllő–Site 5 settlement.<sup>435</sup>

#### Type I/6

Handled mug with curved neck and rounded shoulder (H. 9–10 cm). A handleless variant with rounded conical shoulder is also known.<sup>436</sup>

This mug type does not appear over the entire Makó–Kosihy–Čaka distribution. Most pieces have been found in the southerly regions of the Great Hungarian Plain. Good analogies to the pieces from the Hódmezővásárhely area can be quoted from the late Vučedol assemblages of southern Transdanubia.<sup>437</sup> The mugs from Hódmezővásárhely–Diószegi-tanya are carefully made pieces fired to a black colour. Other vessel types found at the Hódmezővásárhely site too compare well with the late Vučedol finds from southern Transdanubia: a flat bowl is matched by a similar piece from Pit 3 of the Lánycsók–Égettmalom site.<sup>438</sup>

#### Type I/7

Wide-mouthed mug with low, curved neck and rounded shoulder, originally probably fitted with a handle (H. 10 cm).<sup>439</sup> This type has so far only been found in the southern Makó–Kosihy–Čaka distribution.

### Types I/8–12 (Fig. 18)

#### Type I/8

Small handled mug with flaring neck and conical shoulder (H. 9 cm).<sup>440</sup> A variant of the rare handled cups known from the eastern Makó–Kosihy–Čaka distribution.

<sup>433</sup> Szava: *Ecsedy* (1979a) Taf. IX. 2; and Ásotthalom–Borgazdaság, Hajdukovo/Hajdújárás: *Horváth* (1984a) T. III. 2, T. V. 3.

<sup>434</sup> Boldog–Vasútállomás: *Kalicz* (1998a) Fig. 14. 1.

<sup>435</sup> *Kővári–Patay* (2005) Fig. 28. 2, Fig. 29. 3.

<sup>436</sup> Hódmezővásárhely–Diószegi-tanya: *Banner* (1939) Fig. 2. 1; *Kalicz* (1968) Taf. II. 11; Hódmezővásárhely–Égető B.-tanya: *Banner* (1939) Fig. 3. 2. A similar mug was found at Jánosszállás–Katonapart: *Kürti* (1974) Fig. 10.

<sup>437</sup> Lánycsók–Égettmalom: *Ecsedy* (1980) Pl. I. 15.

<sup>438</sup> *Kalicz* (1968) Taf. II. 12. Cp. Lánycsók–Égettmalom: *Ecsedy* (1980) 97, Pl. I. 4, 5.

<sup>439</sup> Hódmezővásárhely–Diószegi-tanya: *Banner* (1939) Fig. 2. 6; *Kalicz* (1968) Taf. II. 10; Battonya–Aradi Road (fragments): *G. Szénászký* (1987–88) Fig. 5. 3, 4.

<sup>440</sup> Kompolt–Kistér: *Gogáľtan* (1999a) Pl. 17. 4.



#### Type I/9

Handled mug with low cylindrical neck and rounded body (H. 8–10 cm).<sup>441</sup> This mug type appears to have been most popular among the Makó–Kosihy–Čaka communities of the Great Hungarian Plain. Its variants appear among the finds of the Bell Beaker–Csepel group.<sup>442</sup>

#### Type I/10

Handled mug with curved neck and squat biconical body. The handle spans the rim and the prominent shoulder (H. 8.3 cm). A pair of vertical ribs extends from below the handle toward the base.<sup>443</sup>

A rare type in the Makó–Kosihy–Čaka distribution, this mug variant is predominantly known from the culture's eastern territories. Similar types have been found on the settlements of the Somogyvár–Vinkovci culture in Slavonia and the Srem.<sup>444</sup> Vessels with a moustache rib below the handle first appear in greater number during the early Nagyrév period, retaining their popularity until the transition from the Early to the Middle Bronze Age.<sup>445</sup> This decoration was also often applied on vessels of the Bell Beaker culture from the Budapest area<sup>446</sup> and it appears also in the pottery of the culture's western groups. The moustache rib and its many variants can be regarded as chronological anchors for this period owing to their widespread popularity.

#### Type I/11

A mug/jug type whose form cannot be precisely reconstructed. A slender vertical rib is set on the shoulder of the conical vessel, occasionally combined with a triple rib below the handle.

Fragments of this vessel type have been reported from the Tiszalúc–Sarkadpuszta settlement<sup>447</sup> and they occur among the finds collected during the survey of the settlement at Kömlő–Szövetkezeti földek (Pl. 4. 6). Pottery adorned with similar slender ribs can be found among the amphora shaped vessels (Types XV/5–6) deposited in the Makó–Kosihy–Čaka burials in the northern part of the Great Hungarian Plain. Vessels adorned with slender ribs have so far only been found on the culture's sites in this northern region. Parallels to this decoration occur among the pottery finds of the neighbouring cultures. While the mug type itself does not occur among its wares, similar slender ribs were set below the handle of larger vessels of the Roșia group<sup>448</sup> and on vessels of the Șoimuș group distributed in the Maros Valley to its south.<sup>449</sup> The best parallels, however, are the jugs of the Moravian Corded Ware culture.

#### Type I/12

Handled biconical mug with tall, slightly flaring neck (H. 8–10 cm). A rare type, of which no more than a few pieces differing slightly from each other are known.

<sup>441</sup> Kömlő: *Kalicz* (1968) Taf. III. 1; Szeghalom–Környe: *G. Szénászký* (1987–1988) Fig. 8. 2; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. III. 2; Tiszalúc–Sarkadpuszta, Pit 7/G: *Szathmári* (1999b) Taf. XVII. 3.

<sup>442</sup> Szigetszentmiklós: *Endrődi* (1992) Fig. 54. 3.

<sup>443</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XVII. 2.

<sup>444</sup> Vinkovci: *Dimitrijević* (1982a) T. 5. 4.

<sup>445</sup> *Bóna* (1963) Pl. II. 3, Pl. VII. 14, Pl. XII. 2, 4–5; *Bándi* (1982) Abb. 8. 17; *Csányi* (1982–83) Fig. 10. 1b, 4, Fig. 12. 1.

<sup>446</sup> *Schreiber* (1972) Fig. 6. 5, 8, 12; *Endrődi* (1992) Fig. 15, Fig. 17. 1.

<sup>447</sup> *Szathmári* (1999b) Taf. I. 3, Taf. II. 6, Taf. VIII. 8, Taf. IX. 2, 14, 15, Taf. XII. 4, Taf. XVII. 2.

<sup>448</sup> *Emődi* (1985) Fig. 18. 14, 43, 77.

<sup>449</sup> Poiana Ampoiului/Ompolymező, Zlatna/Zalatna: *Ciugudean* (1996) Fig. 58. 8, Fig. 67. 6–7, Fig. 68. 5–9.



#### Type I/12a

A stray find from County Veszprém can be assigned here. The handle is set on the neck, the belly is sharply carinated.<sup>450</sup> The piece bears a remarkable resemblance to the handled cups and jugs of the Nyírség culture.<sup>451</sup>

#### Type I/12b

A variant with flaring neck and rounded carination came to light from Grave 8 at Čaka.<sup>452</sup>

#### Type I/12c

A squatter variant, also from Grave 8 at Čaka.<sup>453</sup> Good parallels to this variant can be found among the mugs from the Vinkovci settlement.<sup>454</sup> Other matching pieces occur among the wares of the late Corded Ware culture of Bohemia and Moravia, and the early Aunjetitz culture.<sup>455</sup>

### Types I/13–14 (Fig. 18)

#### Type I/13

Wide-mouthed biconical mug with low neck and a strap handle on the shoulder.<sup>456</sup> The piece found at Malé Kosihiy is uncommon in the Makó–Kosihiy–Čaka ceramic inventory; similar vessels are known from the burials in Moravia.<sup>457</sup>

#### Type I/14

Handled, gently carinated biconical mug with low cylindrical neck (H. 8 cm). The shoulder is encircled by a zig-zagging cordon.<sup>458</sup> This vessel form is uncommon in the Makó–Kosihiy–Čaka ceramic repertoire and more typical for the more slender pieces with a wavy cordon around the shoulder of the Corded Ware culture.<sup>459</sup> This mug does not appear to have been one of the main mug types of the Makó–Kosihiy–Čaka culture; specimens recalling the basic Makó–Kosihiy–Čaka form occur more frequently in the late Corded Ware culture.<sup>460</sup>

<sup>450</sup> County Veszprém: *Kalicz* (1968) Taf. X. 4.

<sup>451</sup> *Kalicz* (1968) Taf. XIII. 3, Taf. XXVII. 8, 9, 12.

<sup>452</sup> *Vladár* (1966) Abb. 26. 2.

<sup>453</sup> *Ibidem* Abb. 26. 1.

<sup>454</sup> *Dimitrijević* (1982a) T. 4. 7, T. 5. 2.

<sup>455</sup> *Vladár* (1966) 274–275.

<sup>456</sup> Malé Kosihiy–Törökdomb: *Točík* (1961a) Abb. 6. 18; *Vladár* (1966) 277–278, Abb. 12. 6, Abb. 31. II.1. A similar, but slightly wider mouthed handled bowl is known from Kamenín, Pit 26/77: *Nevizánsky* (2001) Tab. III. 1.

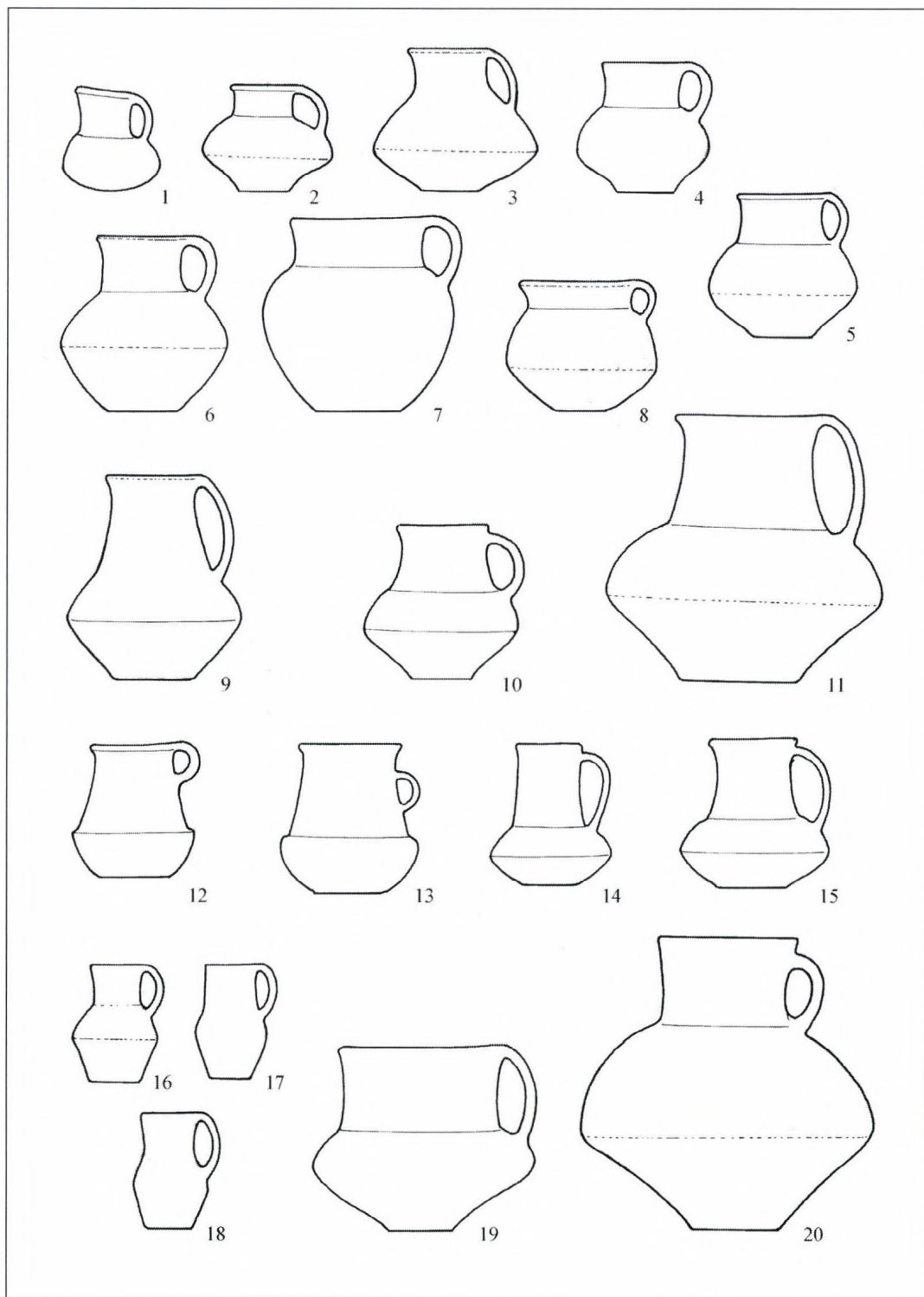
<sup>457</sup> Sudomeřice II, Grave 4: *Peška–Šebela* (1992) 132, Abb. 2. 7.

<sup>458</sup> Nové Zámky–Sektor D/1: *Vladár* (1966) Abb. 19. Mugs of this type occur infrequently in the eastern distribution. Examples can be quoted from Üllő–Site 5: *Kővári–Patay* (2005) Fig. 39. 2, and Tiszapüspöki–Karancs–Háromág: *Csányi–Cseh–Tárnoki* (2002) Fig. 4. 1.

<sup>459</sup> E.g. Herzogenburg group of the Corded Ware culture: Franzhausen I–768/2: *Neugebauer-Maresch* (1994a) Abb. 8. 2.

<sup>460</sup> Cp. also *Vladár* (1966) 278, Abb. 19, Abb. 31. II/2.





*Fig. 19. Somogyvár-like jugs and mugs on the territory of the Makó-Kosihy-Čaka culture*

1. Battonya-Georgievics-tanya, 2. Szeghalom-Környe, 3. Pişcolt-Nişipărie, 4. Szarvas-Káka, Kettőshalom, 5. Békéscsaba-Alvégi legelő, majorok, 6. Tiszacsege, 7. Nagyhegyes-Elep 25, 8. Tiszkürt-Homoki szőlő, 9. Kompolt-Kistér, 10. Eger-Szarvaskő, 11. Jászdózsa-Kápolnahalom, 12-15. Budapest-Aranyhegyi Road, 16-18. Tata-Tófarok, 19. Ivanka pri Nitre, 20. Čaka-Kopec, Grave 5

H. 6-24.5 cm



## Type I/15 (Fig. 18)

### Type I/15

Small mug with curved neck decorated with three or four flattish knobs on the shoulder. Intact handled and handleless variants (H. 4.4 and 6.6 cm resp.) have been found in the Hódmezővásárhely area.<sup>461</sup>

## II. Vessels with asymmetrical handles (Fig. 20)

Mugs, jugs and smaller pots with a large handle springing from the rim or from below the rim and a smaller one on the shoulder have been assigned to this category. Several variants of the basic form can be distinguished.

### Type II/1

Squat biconical jug with low, slightly flaring neck. Relatively small pieces standing 10–11 cm high are known from the Makó–Kosihy–Čaka distribution. An undecorated specimen comes from an inhumation burial of the Budapest–Szentmihályi Road site.<sup>462</sup> Another similar piece decorated with an incised zig-zag line was brought to light from a crouched inhumation burial at Tarnaszány.<sup>463</sup>

The basic form appears on late Vučedol sites.<sup>464</sup> Another indication of the type's early date is that the smaller handle of the Budapest vessel is ribbed, a trait also pointing towards the late Vučedol tradition.<sup>465</sup> The vessel from Tarnaszány is formally close to the late Vučedol vessels with asymmetrical handles. Designs of parallel zig-zag lines are matched by similar patterns on the mugs, jugs and flasks of the Somogyvár–Vinkovci settlements in the southern part of County Baranya.<sup>466</sup>

The cultural attribution of the burials unearthed at Budapest–Szentmihályi Road and Tarnaszány was open to controversy owing to the funerary rite and the grave pottery.<sup>467</sup> An exciting new find assemblage has recently been published by Alla V. Nikolova and Yuri Ya. Rassamakin.<sup>468</sup> Grave 1 of Kurgan 10 of the Sofievka cemetery on the left bank of the Dnieper contained a vessel resembling the one from Tarnaszány to the smallest detail. The vessel from the double child burial dated to the late Yamnaya culture (2500–2400 BC) is definitely related to the northern Hungarian piece.

### Type II/2

Plain biconical mug with low, cylindrical neck and curved shoulder (H. 8.6 cm). A stray find of this mug type is known from a site between Szentes and Orosháza (251; Pl. 1. I).

<sup>461</sup> Hódmezővásárhely–Diószegi-tanya: *Kalicz* (1968) Taf. II. 14; Hódmezővásárhely–Égető B.-tanya: *Banner* (1939) Fig. 3. 4.

<sup>462</sup> *Tompa* (1945) 15, Fig. 1. 6; *Kalicz* (1968) 80, Fo. 71, Taf. III. 3; *Schreiber* (1972) 152, Fig. 1. 4.

<sup>463</sup> *Kalicz* (1968) 80, Fo. 70, Taf. III. 2.

<sup>464</sup> Ig: *Korošec–Korošec* (1969) T. 13. 1, T. 14. 1, 2; *Dimitrijević* (1977–78) Taf. 18. 7, 10; Zók–Várhegy: *Schmidt* (1945) Textbild 84. 2.

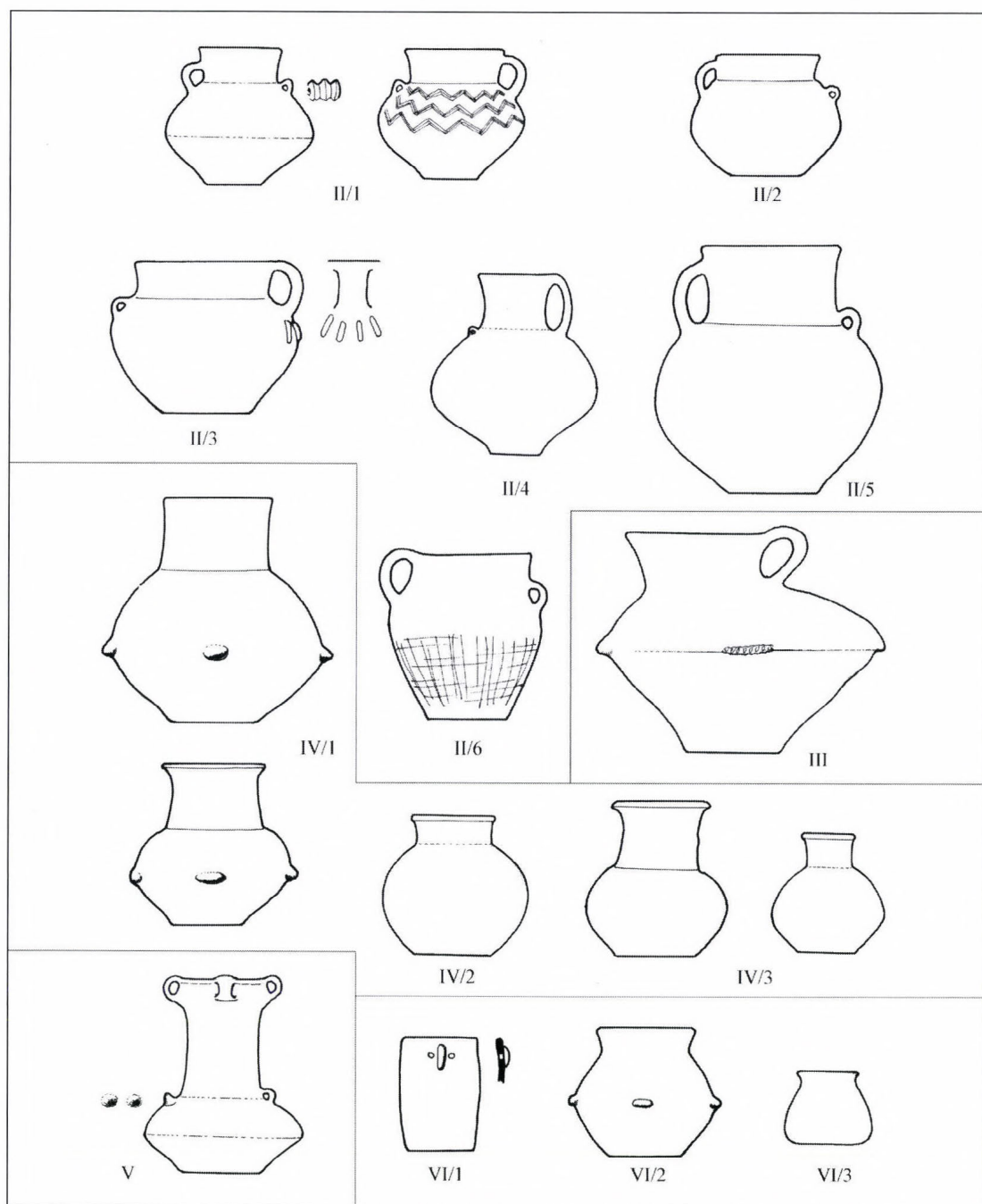
<sup>465</sup> Some amphoras have a ribbed handle too, such as the specimen from Zók–Várhegy: *Schmidt* (1945) Textbild 84. 1.

<sup>466</sup> Zók–Várhegy: *Ecsedy* (1980) Pl. IV. 1–2, 4; Pécsvárad: *Bóna* (1965a) Pl. XVI. 1–2. In the north, there is only a single zig-zag line: Somogyvár–Kupavárhegy: *ibidem* Pl. X. 4; Keszthely–Fenépuszta: *ibidem* Pl. XIV. 1.

<sup>467</sup> *Kalicz* (1968) 82; *Kalicz-Schreiber* (1991) 13; *Kalicz* (1998a) 5.

<sup>468</sup> *Rassamakin–Nikolova* (2008).





*Fig. 20. Vessel types of the Makó-Kosihi-Čaka culture. Types II–VI*

Type II. vessels with asymmetrical handles: II/1: Budapest–Szentmihályi Road, Tarnazsadány, II/2: Between Orosháza and Szentés, II/3: Battonya–Georgievics-tanya, II/4: Hódmezővásárhely–Gorzsá, Cukor-tanya, II/5: Ivanka pri Nitre, II/6: Csongrád–Vidresziget;

Type III. askoi: Rábé–Ankasziget;

Type IV. flask shaped vessel: IV/1: Debrecen–Köntöskert, 22 Bezerédj Street, Kál–Legelő, IV/2: Tiszalúc–Sarkadpuszta, IV/3: Tiszalúc–Sarkadpuszta, Debrecen–Bellegelő;

Type V. anthropomorphic vessel: Budapest–Aranyhegyi Road;

Type VI. cups: VI/1: Debrecen–Köntöskert, 30 Bezerédj Street, VI/2: Oszlár–Nyárfaszög, VI/3: Oszlár–Nyárfaszög

H. 4–22.5 cm

### Type II/3

Biconical vessel with low, curved neck and rounded carination. The large piece from Battonya–Georgievics-tanya is decorated with four ribs below the handle (H. 11 cm).<sup>469</sup>

Comparable pieces to the one-handled basic form have been published from the Börzönce settlement of the Somogyvár–Vinkovci culture<sup>470</sup> and the Bell Beaker cemetery at Budapest–Békásmegyer.<sup>471</sup> They also appear among the stray finds of the early Nagyrév culture.<sup>472</sup> Multiple ribs set on the shoulder and below the handle of jugs and small pots make their appearance in early Nagyrév contexts during the Early Bronze Age 2 in the Budapest area,<sup>473</sup> the Vác area<sup>474</sup> and on sites formerly assigned to the Kötörés group in the Tisza region.<sup>475</sup>

### Type II/4

Gently carinated biconical jug with elongated, cylindrical neck (H. ca. 15 cm). One such vessel was found among the grave goods of an urn burial from Hódmezővásárhely,<sup>476</sup> while another one was allegedly found at Kunszentmárton.<sup>477</sup>

The type resembles the tall one-handled jugs and the jugs with asymmetrical handles (H. 20–30 cm) from the Somogyvár–Vinkovci settlements in Slavonia and the Srem.<sup>478</sup> The first comparable Transdanubian vessel came to light near Szekszárd (*Pl. 51. 2*).<sup>479</sup> A squatter variant with taller neck and biconical body is known from Priboj.<sup>480</sup> This type is not a leading type of the Makó–Kosihy–Čaka culture.

### Type II/5

Wide-mouthed, gently carinated biconical jug with cylindrical neck (H. 22.5 cm). One such carefully polished vessel fired to a red colour lay among the grave goods of an inhumation burial found at Ivanka pri Nitre.<sup>481</sup> Bóna linked the burial to the northward advance of the Somogyvár–Vinkovci culture.<sup>482</sup> However, good parallels to the vessel can also be quoted from the Corded Ware culture of Moravia.<sup>483</sup>

### Type II/6

Small, wide-mouthed pot (H. ca. 14 cm). The type is known from the Csongrád–Vidresziget settlement.<sup>484</sup>

<sup>469</sup> Bondár–D. Matuz–Szabó (1998) Fig. 13. 1. A stray jug from Tiszalúc–Sarkadpuszta has been tentatively assigned to the Makó–Kosihy–Čaka culture: *Szathmári* (1999b) Taf. XVIII. 5.

<sup>470</sup> Bondár (1995) Pl. 173. 345.

<sup>471</sup> Schreiber (1972) Fig. 6. 12.

<sup>472</sup> Dunaalmás (stray find): Bóna (1963) Pl. XIII. 13; (Baks–) Sövényháza–Kötörés (stray find): Bóna (1963) Pl. XII. 5.

<sup>473</sup> Schreiber (1972) Fig. 6. 4, 5, 11, 12; Kalicz–Schreiber (1984b) Taf. XXXV. 19, Taf. XXXVI. 1, 3; Kalicz–Schreiber–Kalicz (1999) Fig. 15. 1–2.

<sup>474</sup> Bóna (1963) Pl. XIII. 5, 11, 13.

<sup>475</sup> *Ibidem* Pl. X. 2–2a, 5, 6–6a, Pl. XI. 2, 5, 6, 12, Pl. XII. 2–2a, 4, 5, 11, 14.

<sup>476</sup> Hódmezővásárhely–Gorza, Cukor-tanya: *Gazdapusztai* (1959) Pl. I. 1; Kalicz–Schreiber (1991) Fig. 18. 5.

<sup>477</sup> A vessel of this type from Kunszentmárton was first mentioned by Kalicz: Kalicz (1968) 93; the findspot was specified as between Kunszentmárton and Szentes (163) by Kalicz–Schreiber (1991) 12.

<sup>478</sup> Batrovci–Gradina, Ilok, Vinkovci: Tasić (1984) Taf. I. 4, Taf. IV. 3, 8.

<sup>479</sup> Tolna–Mözs (SV cat. no. 229), Feature 390, a proto-Nagyrév settlement.

<sup>480</sup> Garašanin (1959) Taf. 20. 5.

<sup>481</sup> Vladár (1966) 276, Abb. 28. 2.

<sup>482</sup> Bóna (1992a) 13.

<sup>483</sup> Menín: Vladár (1966) 276–277, Abb. 31. I. 5.

<sup>484</sup> Kalicz–Schreiber (1991) 12, Fig. 14. 7. The other finds are unpublished.



Comparable pots with asymmetrical handles make their appearance from the Vučedol B2 period onward on the culture's settlements, although their surface treatment differs and they have a wider strap handle or string hole lug which do not spring from the rim.<sup>485</sup>

The mug and jug variant of vessels with asymmetrical handles were often deposited in inhumation burials, for example at Budapest–Szentmihályi Road, Ivanka pri Nitre and Tarnazsadány, or, more rarely in inurned cremation burials, as at Hódmezővásárhely–Gorzsá-Cukor-tanya. Some are stray finds, such as the pieces from Kunszentmárton and the area between Szentes and Orosháza. The single piece from a settlement is a variant of the rib decorated small pot from Battonya–Georgievics-tanya and a variant resembling a cooking pot from Csongrád–Vidresziget, a rare type in Makó–Kosihy–Čaka contexts.

Vladár assigned the pieces from Ivanka pri Nitre to his Type 5 jugs, quoting similar vessels from Hungary and the vessels with asymmetrical handles of the Vučedol culture and the Bohemian–Moravian Corded Ware culture.<sup>486</sup> Kalicz assigned vessels with asymmetrical handles to his Type 8/d of the one-handled jugs of the Makó–Kosihy–Čaka group of the Zók culture. In his discussion of a jug with southern affinities from the Tiszadob site of the Nyírség group, he also offered an overview of similar vessels with asymmetrical handles appearing in Makó–Kosihy–Čaka contexts.<sup>487</sup> He distinguished three typochronological horizons for the latter, distributed from Bohemia and Moravia to Anatolia and Cyprus, and derived them from the Bronze Age cultures of Anatolia and Cyprus.

In her survey of vessels with asymmetrical handles, Kalicz-Schreiber listed over twenty pieces from the northern Balkans, the Carpathian Basin and Moravia, dating variously from the Copper Age and the Early Bronze Age.<sup>488</sup> She linked the appearance of the vessel in the Tisza and Körös region and in the Budapest area to the cultural changes leading to the emergence of the Nagyrév culture, suggesting that the cradle of this transformation lay in the southerly regions of the Somogyvár–Vinkovci (Belotić) culture.

Endrődi dated the jug with asymmetrical handles found on the Szigetszentmiklós–Üdülősor settlement of the Bell Beaker–Csepel group to the end of the Makó–Kosihy–Čaka sequence and the Nagyrév period, corresponding to the arrival and settlement of the Bell Beaker culture.<sup>489</sup> The handled jug itself has little in common with the Bell Beaker wares of the central Danube region, sharing affinities with the biconical jugs with cylindrical neck of the southern Somogyvár–Vinkovci distribution<sup>490</sup> and the Early Bronze Age 2 groups of the Budapest area. The vessel's decoration imitates the deeply incised zonal arrangement of bell beakers proper, while the ribs below the handles were a hallmark of the period's general ornamental repertoire.

The use of vessels with asymmetrical handles can be noted from the Late Copper Age in the northern Balkans and from the Early Bronze Age in the Carpathian Basin<sup>491</sup> and the neighbouring

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<sup>485</sup> Schmidt (1945) Taf. 32. 6.

<sup>486</sup> Vladár (1966) 276–277, Abb. 31. I. 5.

<sup>487</sup> Kalicz (1968) 83, 93–94.

<sup>488</sup> Kalicz-Schreiber (1991).

<sup>489</sup> Endrődi (1992) 93–94, Figs 15–16.

<sup>490</sup> Bela Crkva: Garašanin (1959) Taf. 20. 2.

<sup>491</sup> The practice of placing asymmetrical handles on vessels survived into later periods too. It can be noted during the Early Bronze Age/Middle Bronze Age transition, for example in the cemeteries of the late Nagyrév culture: Szigetszentmiklós–Gere-tanya: Kalicz-Schreiber (1981) Taf. 10. 8, the late Nagyrév/early Vátya culture, Kulcs, Grave X/50: Bóna (1975a) Taf. 10. 1, and the Maros/Mureş culture: Szőreg: Bóna (1975a) Taf. 99. 4, Taf. 100. 19.



territories.<sup>492</sup> The typical vessel form of the Late Copper Age was the small pot with asymmetrical handles, which was later succeeded by various mugs no more than 10–14 cm high at the onset of the Early Bronze Age, and taller, 25–32 cm high jugs towards the end of the period.

Very few pieces are known from the Makó–Kosihy–Čaka distribution proper. The analogies to the known pieces suggest that the type can hardly be ranked among the leading Makó–Kosihy–Čaka forms. This is especially true of Types II/4–5. Regional and chronological differences can perhaps also be assumed. While the typological boundary between individual variants is not particularly sharp, it would appear that squatter variants of the vessels with asymmetrical handles (Types II/1–2) were more common during an earlier period, when late Vučedol impacts were stronger. Type II/6 can perhaps also be assigned to this earlier period. The taller jugs with asymmetrical handles (Types II/4–5) can most likely be linked to the migration of groups from the Somogyvár–Vinkovci territory in Slavonia and the Srem, as shown by the occurrence of similar pieces on Somogyvár–Ada (Hajdukovo/Hajdújárás)<sup>493</sup> and Roșia sites (Călătea/Kalota and Gălășeni/Gálosháza).<sup>494</sup> The vessel from the Hódmezővásárhely–Gorzsá-Cukor-tanya burial and the stray specimen from Kunszentmárton can likewise be associated with this period. One good anchor point for the chronology of the late jug type is a vessel from the Szekszárd area (*Pl.* 51. 2), which has strong formal affinities with the pieces from the Srem and Slavonia. The Tolna–Mözs jug is an isolated piece and can most likely be associated with the yet little known onset of the proto-Nagyrév period along the Danube.

Likewise, Type II/3 has more in common with the forms and decorative elements of the Early Bronze Age 2. The presence of this variant on the Battonya settlement can be associated with the arrival of the Somogyvár–Vinkovci groups to the Maros and Körös Valleys. Some of the amphoras in the pottery assemblages from the Battonya settlement and a small handled mug too have parallels in the same cultural complex.<sup>495</sup>

### III. Askoi (Fig. 20)

The single bird shaped vessel assigned to the Makó–Kosihy–Čaka culture is a stray finds from Sövényháza; the site is now known as Rabe–Ankasziget (427).<sup>496</sup> A less carefully made asymmetrical vessel from a burial uncovered at Hódmezővásárhely–Gorzsá-Kovács-tanya can also be classified among askoi.<sup>497</sup>

The dating of the large, 20.5 cm high askos from Rabe to the Makó–Kosihy–Čaka culture was based on a small decorated vessel from Zók–Várhegy.<sup>498</sup> The bird shaped vessel from the eponymous Vučedol site is more elegantly modelled.<sup>499</sup> No vessels of this type are known from Ig, and neither do we know of any bird depictions in the Somogyvár–Vinkovci complex. The two vessels modelled

<sup>492</sup> A different jug type was current in the late Corded Ware culture of Bohemia and Moravia.

<sup>493</sup> Hajdukovo–Köröspart, cremation burial: *Horváth* (1984a) 13, Tab. III. 1, Tab. IV. 1.

<sup>494</sup> *Molnár–Ghemis* (2003) Pl. 9. 27–30. One variant is known from the so-called “Kistengrüberhorizont” post-dating the Glina III period in the Argeș Valley, Apa Sărată: *Schuster* (1997) Fig. 79. 1. The Early Bronze Age IIb is marked by the Glina IV/Năeni–Schneckenberg/Șoimuș/late Jigodin/Zoltan/Nir II horizon: *Schuster* (1997) 276–278.

<sup>495</sup> *Bondár–D. Matuz–Szabó* (1998) Fig. 14. 2, 5, Fig. 17. 4.

<sup>496</sup> *Vörös* (1997) 125.

<sup>497</sup> *Gazdapusztai* (1957) Pl. XVIII. 2a–b.

<sup>498</sup> *Tompa* (1937) 61, Taf. 20. 6.

<sup>499</sup> Vučedol: *Schmidt* (1945) Taf. 50. 1a–b. Bird head depictions first appear in the classical Vučedol period, although in an entirely different form: Vinkovci: *Vučedol* (1988) Cat. 44; cp. also *Velušček* (2007).



on birds known from the Nyírség culture are closer to the original, more carefully made pieces from Vučedol.<sup>500</sup>

Bird shaped askoi fitted with a handle were highly popular during the Middle Bronze Age as shown by its many variants from the Hatvan, Ottomány, Gyulavarsánd and Füzesabony cultures, as well as the bird depictions of the period's other cultures.<sup>501</sup>

Askoi have also been found in more distant regions, for example on the site of the Zimnicea type.<sup>502</sup> In contrast, no vessels of this type have yet been brought to light from Gлина III–Schneckenberg contexts. A highly schematic askos type is known from the Jigodin group.<sup>503</sup>

It would seem that the bird shaped vessels inspired by Vučedol traditions lost their appeal at the onset of the Early Bronze Age and re-appeared in a much more distinctive form and in greater number during the Middle Bronze Age, a period characterised by an entirely different network of cultural interaction.<sup>504</sup> The stray askos from Rabe would suggest that the type was known in the southern Makó–Kosihy–Čaka distribution during the culture's formative period and that the asymmetrical vessels from the Great Hungarian Plain perhaps imitated this prototype.

#### IV. Flask shaped vessels (Fig. 20)

Assigned to this category are the handleless biconical vessels with elongated neck. Kalicz described these vessels as “flaschenformiges Gefäß” (“kleine Flaschengefässe” or “Flaschenform”) and assigned them to his Type 1.<sup>505</sup> While the number of similar handleless vessels has since grown and several variants can be distinguished among them, these variants are for the time being mostly unique, individual pieces (Types IV/2–3).

##### Type IV/1

Handleless biconical vessel with slightly constricted, conical neck (H. 12.7–19.5 cm). Four flat knobs are set on the carination.<sup>506</sup> A similar, but smaller vessel (H. 9.2 cm) is known from Senta/Zenta on the right bank of the Tisza.<sup>507</sup> The finds from this site, earlier assigned to the Ada group, are now regarded as representing the Somogyvár–Ada group.

This vessel type shows a concentration in the culture's southern and eastern distribution. Intact and restorable pieces have been found among the grave goods of inurned and symbolic burials at Kál–Legelő III (Grave 32) and Makó–Vöröskereszt. The stray finds from Debrecen–Köntöskert and Senta/Zenta had

<sup>500</sup> Hosszúpályi, County Szabolcs: Kalicz (1968) Taf. XI. 1a–c, Taf. XVI. 1a–b.

<sup>501</sup> For a discussion of askoi, bird-shaped vessels, bird shaped rattles and bird depictions, cp. Kovács (1972) 8; *idem* (1992) 81–82; Szathmári (2003); Guba–Szeverényi (2007).

<sup>502</sup> Brailița: Kalicz (1968) 99; Machnik (1991a) Fig. 4. 13.

<sup>503</sup> Lelicieni/Csíkszentlélek–Muntele: Machnik (1991a) Fig. 5. 32; Roman–Dodd–Oprițescu–János (1992) Taf. 124–125.

<sup>504</sup> Szathmári (2003); *idem* (2005). Traces of animal blood, perhaps the remains of a sacrifice, were noted on an askos fragment of the Middle Bronze Age Hatvan culture from Alsóvadász–Várdomb: Szathmári (2003) 519–520.

<sup>505</sup> Kalicz described the vessel as an infrequent type of the Makó group (Makó–Vöröskereszt: Kalicz [1968] 83, Taf. CXXVI. 11) and one of the hallmarks of the Nyírség group (Debrecen–Köntöskert: *ibidem* 74, Taf. CXXVII. 1e). Cp. also Kalicz (1984a) 97.

<sup>506</sup> Debrecen–Köntöskert: Kalicz (1968) 64, 74, Fo. 15, Taf. CXXVII. 1e; Némethi–Dani (2001) Fig. 8. 4; Kál–Legelő III, Grave 32: Kulcsár–Szabó (2000) Fig. 4. 2, 3; Makó–Vöröskereszt: Banner (1939) Fig. 6. 2; Kalicz (1968) Taf. II. 3.

<sup>507</sup> Senta/Zenta–Pobeda brick factory: Horváth (1984a) Tab. VI. 1. An interior decorated bowl has also been published from this site: *ibidem* Tab. VI. 3–4.

probably also been deposited in burials, at least judging from their intact condition. One fragmentary vessel of this type was recovered from the settlement at Debrecen–Városi téglagyár.<sup>508</sup> An almost intact specimen from Lovasberény in Transdanubia, perhaps part of a grave inventory, indicates that the type was also known in that region.<sup>509</sup>

#### Type IV/2

Small biconical vessel with thickened rim and low, cylindrical neck (H. 8.6 cm). The currently known single representative of this type comes from Tiszalúc–Sarkadpuszta.<sup>510</sup> No exactly matching piece is known from the Makó–Kosihy–Čaka distribution. A similar vessel type, a globular, wide-mouthed handled mug is known from the Somogyvár–Vinkovci settlement at Börzönce.<sup>511</sup>

#### Type IV/3

Handleless, squat biconical vessel with outturned rim and cylindrical neck. Fragments of a vessel resembling the flask from Tiszalúc–Sarkadpuszta<sup>512</sup> have been published from Mužla.<sup>513</sup> A similar piece, a stray find, reached the Debrecen museum from Debrecen–Bellegelő (H. ca. 7 cm).<sup>514</sup> No comparable pieces are known from the Somogyvár–Vinkovci culture.

### V. Anthropomorphic vessel (Fig. 20)

Biconical ovoid vessel with tall, cylindrical neck and tiny handles on the rim (H. ca. 15 cm).<sup>515</sup> A small handle is set on the neck and two small knobs on the shoulder opposite the handle. A variant with a similar rim, but lower neck is also known.<sup>516</sup>

The type is unparalleled. The single intact piece comes from a scattered cremation burial of the Budapest–Aranyhegyi Road site dated to the late Makó–Kosihy–Čaka period. Kalicz-Schreiber interpreted the vessel as a schematic rendering of the human body.<sup>517</sup> The fragment of a similar vessel from Budapest–Budaörs Airfield was also recovered from a burial. The vessel bears many traits of the squat biconical mugs and jugs with cylindrical neck of southern origin related to similar wares of the Somogyvár–Vinkovci culture. The small mugs from the grave of the Budapest–Aranyhegyi Road site too confirms the connection with the south.<sup>518</sup>

### VI. Cups (Fig. 20)

#### Type VI/1

Anthropomorphic cup. Cylindrical cup with straight-cut rim. Dani interpreted the vertical rib on the body and the two perforations on either side as the schematic rendering of the human face (H. 7 cm). The single

<sup>508</sup> Némethi–Dani (2001) Fig. 10. 1.

<sup>509</sup> Bándi (1982) Abb. 12. 7.

<sup>510</sup> Szathmári (1999b) Taf. VIII. 1.

<sup>511</sup> Bondár (1995) Pl. 173. 345.

<sup>512</sup> Szathmári (1999b) Taf. XV. 4.

<sup>513</sup> Kuzma–Hanuliak (1990) Abb. 4. 1.

<sup>514</sup> Kalicz (1968) Taf. XII. 4.

<sup>515</sup> Budapest–Aranyhegyi Road, Grave: Kalicz–Schreiber (1994) Abb. 2. 4a–b.

<sup>516</sup> Budapest–Budaörs Airfield, Grave (?): Schreiber (1984a) Taf. I. 10.

<sup>517</sup> Kalicz–Schreiber (1991) 41.

<sup>518</sup> *Ibidem* Abb. 3. 3.



currently known piece comes from the Debrecen–Köntöskert burial.<sup>519</sup> Comparable pieces can be quoted from among the cups of the Somogyvár–Vinkovci culture (cp. SV Type VI).

#### Type VI/2

Small biconical vessel with low, flaring neck (H. 8.3 cm). Flat knobs are arranged symmetrically on the carination. This variant resembles Type IV/1 flasks. The single, currently unparalleled vessel of this type was found at the Oszlár–Nyárfaszög settlement.<sup>520</sup>

#### Type VI/3

Pear shaped handleless mug with slightly outturned rim and flat base (H. 4.3 cm). The single known specimen comes from Oszlár–Nyárfaszög.<sup>521</sup>

### VII. Bowls (Figs 21–25)

The few basic bowl types of the Makó–Kosihy–Čaka culture show an astonishing variety. Vladár distinguished three main types of bowls with thickened in rim,<sup>522</sup> while Kalicz identified several variants of his two main types, biconical and conical bowls.<sup>523</sup> In addition to quoting various Anatolian and Balkanic parallels, both scholars emphasized the resemblances between the Makó–Kosihy–Čaka bowls and the similar vessels of later early Nagyrév, Bell Beaker and early Aunjetitz periods. A few traits of the Makó–Kosihy–Čaka bowls, such as the thickened in rim, can also be noted on the bowls used by the Bell Beaker culture, for example in the culture's Budapest group.<sup>524</sup> Thickened in rims and biconical bowls also make an appearance in the Somogyvár–Vinkovci distribution.

Six basic bowl types can be distinguished among the bowls of the Makó–Kosihy–Čaka culture.<sup>525</sup> Several variants can be distinguished among bowls with thickened rim, one of the culture's basic bowl types. Variants include bowls with thickened in rim, thickened in and out rim (Types VII/1–5: Figs 21–22), outturned rim (Types VII/6–9: Fig. 22) and oblique rim forms (Types VII/10–14: Fig. 22), which occur on shallower and deeper bowls alike, on variants with prominent shoulder, as well as on semi-spherical and conical bowls.<sup>526</sup> Some bowls were provided with a handle (Types VII/2a–b). This bowl type can be found across the entire Makó–Kosihy–Čaka distribution from Schwechat to Pişcolt, although it seems to have been more popular in the culture's easterly areas.

Biconical bowls, another typical form, too come in many varieties (Types VII/15–24: Figs 23–24). The most common form is the biconical bowl with low neck decorated with a crescentic rib or a triple rib on the shoulder (Types VII/20 and VII/20a, the latter representing the handled variant). The variant with wider mouth (Type VII/19) also occurs in the Somogyvár–Vinkovci distribution (SV Type VII/17). Pieces with a narrower neck are also known (Types VII/21–23), as are deeper (Type VII/23) and larger variants (Type VII/25). Another variant of biconical bowls (Types VII/16–17)

<sup>519</sup> Némethi–Dani (2001) 105, Fig. 9. 1.

<sup>520</sup> Koós (1998) Abb. 7. 1.

<sup>521</sup> *Ibidem* Abb. 3. 3.

<sup>522</sup> Vladár (1966) 278–279, Abb. 31. III. 1–6.

<sup>523</sup> Kalicz (1968) 82, 96–97, Taf. CXXVI. 2–3. For a description of the general traits, cp. Kalicz (1984a) 96, Taf. XXI, Taf. XXII. 4, 8.

<sup>524</sup> Kalicz–Schreiber (1984b) 138.

<sup>525</sup> Small conical bowls (Type VIII) and interior decorated bowls (Type IX) are described and discussed separately.

<sup>526</sup> Csányi (1996) 55; Kalicz (1998a) 11.

have so far principally been found on sites in the Little Hungarian Plain, for example at Abda and Táp.

Wide-mouthed deep bowls (Types VII/26–27: *Fig. 24*) have their best parallels in the ceramic inventory from Vinkovci. Other forms (Types VII/29–32: *Fig. 25*) are infrequent, represented by single finds only.

Bowls come in many sizes. Most are 5–12 cm high and have a diameter of 10–30 cm. Higher pieces (H. 23–29 cm) can only be found among the deep bowls.

Most bowls are smoothed, although two different types of surface treatment can be frequently seen, with the upper part smoothed and the lower part below the shoulder rusticated. The belly is often rusticated by smeared barbotine (“Schlickwurf”), scoring or, occasionally, combed decoration.<sup>527</sup> A few bowls have a surface with parallel bands of finger-channelling.<sup>528</sup>

Bowls were rarely decorated. Most have appliqué decoration either in the form of short straight ribs or crescentic ribs set on the shoulder. Triple knobs set on the shoulder occur both among bowls<sup>529</sup> and small pots. Bowls decorated with one or two knobs are infrequent,<sup>530</sup> as are pieces with a row of knobs encircling the shoulder.<sup>531</sup> Some bowls have a grooved shoulder, or have a rib decorated with finger impressions<sup>532</sup> or grooving<sup>533</sup> set on it. Occasionally, the entire shoulder is encircled by a finger impressed cordon.<sup>534</sup> A row of knobs encircling the vessel below the rim has so far only been found on a few conical bowls.<sup>535</sup>

While little can be said about the spatial distribution of bowls within a settlement, or their regional distribution and frequency owing to the low number of finds, a few regional patterns can nonetheless be discerned. Biconical bowls and bowls decorated with crescentic ribs<sup>536</sup> are infrequent in the ceramic assemblage from the settlement at Tisza-kürt–Homoki szőlő in the Middle Tisza region, and the proportion of interior decorated bowls was also quite low. Biconical bowls seem to have been less popular in northern Hungary too. The pottery from the Oszlár–Nyárfaszög settlement did not contain a single biconical bowl, although a few fragments of this type were brought to light at Tisza-lúc–Sarkadpuszta, lying more to the north. Bowls with thickened out rim were lacking at this site and at Hódmezővásárhely–Barci-rét and curved conical bowls with thickened in rim seem to have been more popular.<sup>537</sup> Few conical bowls were earlier known from the Slovakian distribution of the Makó–Kosihy–Čaka culture; however, the preliminary report on more recently excavated settlements, such as Mužla, indicated that bowls of this type were used in this region too. Bowls with strongly outturned rim, indrawn neck and emphatic shoulder were widespread in the Great Hungarian Plain,<sup>538</sup> but seem to have been less popular in the Budapest area.<sup>539</sup>

<sup>527</sup> Čaka: *Vladár* (1966) Abb. 14. 1, 11.

<sup>528</sup> E.g. Tisza-lúc–Sarkadpuszta: *Szathmári* (1999b) Taf. III. 4, Taf. X. 7.

<sup>529</sup> Tisza-lúc–Sarkadpuszta: Type VII/6a.

<sup>530</sup> Battonya–Aradi Road: *G. Szénászký* (1987–88) Fig. 5. 9; Tisza-kürt–Homoki szőlő: *Csányi* (1996) Pl. III. 3.

<sup>531</sup> Kompolt–Kistér: Type VII/2; Tisza-lúc: Type VII/3; Tarnabod: Type VII/13.

<sup>532</sup> Oszlár–Nyárfaszög: Type VII/3a.

<sup>533</sup> Tisza-lúc–Sarkadpuszta: *Szathmári* (1999b) Taf. I. 7, Taf. VI. 5.

<sup>534</sup> Tisza-lúc–Sarkadpuszta: *ibidem* Taf. V. 9, Taf. VI. 7.

<sup>535</sup> Kompolt–Kistér: Type VII/2.

<sup>536</sup> One fragment is decorated in this manner: *Csányi* (1996) Pl. III. 7, Pl. XV. 12.

<sup>537</sup> *Kulcsár* (1997) 24–34.

<sup>538</sup> E.g. Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. VI. 6, Pl. VII. 4; Tisza-kürt–Homoki szőlő: *Csányi* (1996) Pl. I. 1, cp. also Tarnabod–Berekalja, Tisza-lúc–Sarkad.

<sup>539</sup> Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1994) Fig. 12. 12.



*Conical and round bowls with thickened rim (Types VII/1–5; Figs 21–22)*

The basic form is represented by round and conical bowls with thickened rim and slightly indrawn neck, coming in both shallower and deeper varieties. Bowls of this type can be regarded as hallmarks of Makó–Kosihy–Čaka pottery and can be found across the entire Makó–Kosihy–Čaka distribution.<sup>540</sup>

Various techniques were used for thickening the rim. In some cases, the rim was thickened by drawing out the clay from the vessel body as at Tiszalúc–Sarkadpuszta, or by applying separate strips of clay to the rim as at Hódmezővásárhely–Barci-rét.<sup>541</sup> A closer examination of the vessels in question would undoubtedly shed light on which procedure was used at a particular site, although it is unclear whether any importance can be attached to differences between the two procedures.

Type VII/1

Conical bowl with low, indrawn neck and prominent shoulder. A variant with prominent<sup>542</sup> and more rounded shoulder<sup>543</sup> can be distinguished. Some pieces are decorated with grooving on the shoulder,<sup>544</sup> some have a handle<sup>545</sup> or a flat knob on the shoulder.<sup>546</sup> It would appear that this type occurs on all Makó–Kosihy–Čaka sites.

Type VII/1a

A deeper, conical variant of Type VII/1. Most are carefully smoothed,<sup>547</sup> although a few specimens are rusticated directly below the rim.<sup>548</sup> Comparable bowls have been reported from north-western Romanian sites dated to a later phase of the Early Bronze Age.<sup>549</sup>

Type VII/2

The shoulder is rounded and virtually merges with the conical or semi-spherical body. Shallower and deeper varieties are both known.<sup>550</sup> Some bowls of this type have a less thickened rim.<sup>551</sup> The vessel body is either smoothed all over or combined with scoring below the shoulder.<sup>552</sup> Some pieces are decorated with

<sup>540</sup> E.g. Bag–Peres-dűlő: *Kalicz* (1968) Taf. IX. 2–4, 9, 14–17; Battonya–Fővezeték and Battonya–Aradi Road: *G. Szénászký* (1987–88) Fig. 4. 4, Fig. 5. 5, 7, 8, Fig. 6. 2; Csongrád–Sároktanya: *Gazdapusztai* (1966) Fig. 5. 1, Fig. 6. 2; Domony–J. Roob's garden: *Kalicz* (1968) Taf. IV. 7, 12, 21, Taf. VI. 12, 15, 16, 20, 23–25, Taf. VIII. 1–8; Mezőgyán–Gépműhely: *G. Szénászký* (1987–88) Fig. 10. 2, 6; Tápiószele: *Kalicz* (1968) Taf. IX. 20–21, 31, 34–35; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. I. 4, Pl. II. 7, Pl. IV. 2.

<sup>541</sup> *Kulcsár* (1997) Pl. VI. 1–6.

<sup>542</sup> Endrőd–Site 161: *Bondár* (1999) 50, Fig. 7. 4; Kompolt–Kistér, Feature 7: *Gogáltan* (1999a) Pl. 16. 2; Oszlár–Nyárfaszög: *Koós* (1999) Fig. 12. 8, Fig. 13. 8; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 8. 2, 3, 8; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. I. 9, Taf. IV. 6, Taf. VIII. 4.

<sup>543</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. X. 6.

<sup>544</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. IV. 3.

<sup>545</sup> Tiszakürt–Homoki szőlő: *ibidem* Pl. IV. 1.

<sup>546</sup> Battonya–Aradi Road: *G. Szénászký* (1987–88) Fig. 5. 9.

<sup>547</sup> Pişcolt, Grave 74 and 121: *Németi* (1979) Fig. 2. 2, Fig. 3. 3.

<sup>548</sup> Budapest–Budaörs Airfield: *Schreiber* (1972) Fig. 1. 8.

<sup>549</sup> *Németi* (1996) Fig. 8. 5.

<sup>550</sup> Kompolt–Kistér, Feature 7: *Gogáltan* (1999a) Pl. 16. 5; Domony: *Kalicz* (1968) Taf. V. 12.

<sup>551</sup> Battonya–Aradi Road: *G. Szénászký* (1987–88) Fig. 5. 5.

<sup>552</sup> Hódmezővásárhely–Égető B.-tanya: *Banner* (1939) Fig. 4. 4.

flat knobs below the rim or on the shoulder,<sup>553</sup> or with a row of flat knobs encircling the shoulder.<sup>554</sup> One variant is scored below the rim and decorated with flat knobs on the shoulder.<sup>555</sup>

This bowl type was fairly widespread.<sup>556</sup> It variants, sometimes with a flat lug below the rim, are typical in the culture's Lower Austrian sites.<sup>557</sup>

Bowls of this type occur on the southern fringes of the culture's distribution, on the left bank of the Tisza and in the Banat region, where they can be regarded as a hallmark of the Makó–Kosihy–Čaka culture.<sup>558</sup>

Comparable bowls can be found down to the Timiș/Temes mouth, for example in the culturally colourful assemblage from the settlement investigated at Pančevo/Pancsova–Donja varoš.<sup>559</sup>

#### Type VII/2a–b

Small handled variant of Type VII/2. The short handle springs from the rim (Type VII/2a)<sup>560</sup> or from below the rim (Type VII/2b).<sup>561</sup> This variant is occasionally decorated with a row of impressions<sup>562</sup> or grooving<sup>563</sup> on the shoulder.

#### Type VII/2c

A very flat conical variant with knobs set on or below the rim. Most bowls of this type have been recovered from cremation burials.<sup>564</sup>

#### Type VII/3

A deeper variant of conical bowls without a prominent neck or shoulder. A finger-impressed cordon encircles the shoulder. The vessel body is rusticated below the cordon.<sup>565</sup>

<sup>553</sup> Malé Kosihy: *Točik* (1961a) Abb. 6. 7, 8, 14; Táp–Borbapuszta, Pit M: *Figler* (1994) Abb. 4. 3; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. IX. 11.

<sup>554</sup> Kompolt–Kistér, Feature 8 (Grave 1): *Gogáltan* (1999a) Pl. 17. 1.

<sup>555</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. IX. 7.

<sup>556</sup> Bajč: *Vladár* (1966) Abb. 7. 7, Abb. 8. 7; Battonya–Aradi Road: *G. Szénászký* (1987–88) Fig. 5. 7–8; Čaka: *Vladár* (1966) Abb. 14. 10, 11; Endrőd–Site 161: *Bondár* (1999) 50, Fig. 7. 1–7, 10, Fig. 8. 1; Malé Kosihy: *Točik* (1961a) Abb. 6. 1, 2, 5, 6, 9; Mezőgyán–Gépműhely: *G. Szénászký* (1987–88) Fig. 10. 2, 6; Oszlár–Nyárfaszög: *Koós* (1999) Fig. 7. 2, Fig. 11. 6, Fig. 14. 4, Fig. 15. 2; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. III. 3; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XIII. 10.

<sup>557</sup> Schleimbach and Sommerein: *Ruttkay* (1982) Abb. 5–6, Abb. 8–15, Abb. 50.

<sup>558</sup> Sânpetru German/Németszentpéter: *Gogáltan* (1996) T. III. 2–3.

<sup>559</sup> *Grčki–Stanimirov* (1996) T. III. 1–2. The finds from the settlement were earlier assigned to the Somogyvár–Vinkovci culture: *ibidem* 73. However, the ceramic inventory from the settlement reflects a blend of two pottery traditions: the bowls and the handled pots evoke the Makó–Kosihy–Čaka tradition, while the pots and interior decorated bowls recall the Somogyvár–Vinkovci tradition. A cultural blend of this type can be noted in most groups of the Banat region during the Early Bronze Age 1–2.

<sup>560</sup> Jánosszállás–Katonapart: *Kürti* (1974) Fig. 1; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 9. 7; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. IV. 1; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. VI. 7, Taf. IX. 13.

<sup>561</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. III. 4.

<sup>562</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. VI. 7.

<sup>563</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. IV. 1.

<sup>564</sup> Hódmezővásárhely–Gorzsa, Cukor-tanya: *Gazdapusztai* (1959) Pl. I. 2; *Kalicz–Schreiber* (1991) Fig. 18. 4; Schwechat–Brauerei: *Ruttkay* (1995a) Abb. 32. 9.

<sup>565</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. V. 9.



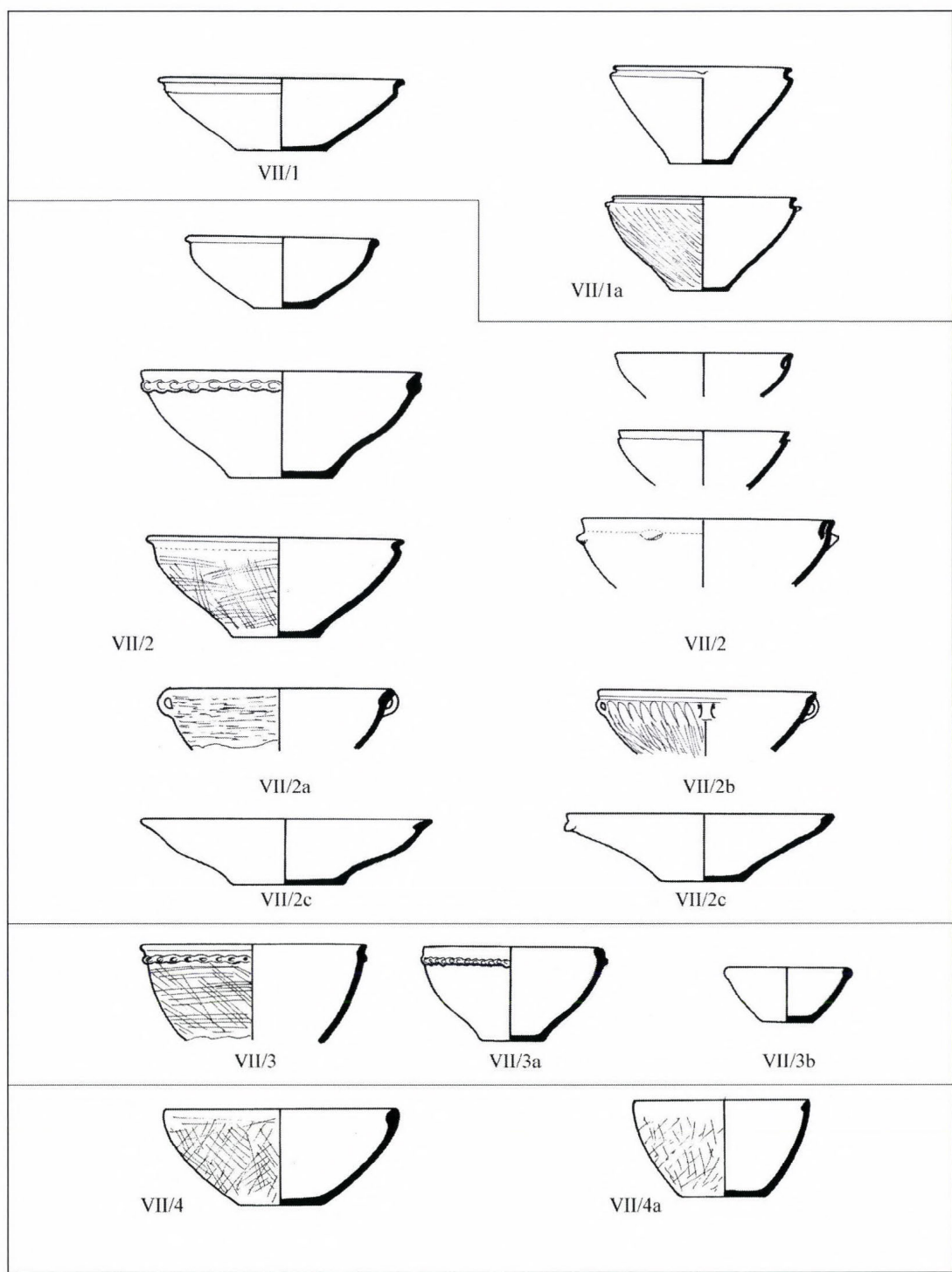


Fig. 21. Vessel types of the Makó-Kosihy-Čaka culture. Types VII/1–4: bowls

Type VII/1: Tiszalúc–Sarkadpuszta, VII/1a: Pişcolt–Nişipărie, Budapest–Budaörs, VII/2: Tiszalúc–Sarkadpuszta, Kompolt–Kistér, Hódmezővásárhely–Barci-rét, Hódmezővásárhely–Solt-Palé, Égető Bálint-tanya, VII/2a: Tiszalúc–Sarkadpuszta, VII/2b: Tiszalúc–Sarkadpuszta, VII/2c: Hódmezővásárhely–Gorzsa, Cukor-tanya, Schwechat–Braueri, VII/3: Tiszalúc–Sarkadpuszta, VII/3a: Oszlár–Nyárfaszög, VII/3b: Kompolt–Kistér, VII/4: Tiszakürt–Homoki szőlő, VII/4a: Tiszalúc–Sarkadpuszta

H. 4–12 cm

Type VII/3a

Variant with strongly thickened in rim, decorated with a similar cordon.<sup>566</sup>

Type VII/3b

Small, plain conical bowl with thickened in rim (H. 4.7 cm).<sup>567</sup>

Type VII/4

Curved conical bowl with thickened in, oblique rim.<sup>568</sup>

Type VII/4a

Variant of Type VII/4 with steep sides. Pieces with scored<sup>569</sup> and smoothed surface<sup>570</sup> up to the rim both occur.

Type VII/5

Bowl with strongly outturned, thickened in and out rim resembling a rib. The indrawn neck is low, the body is conical.<sup>571</sup> The shoulder is occasionally decorated with a rib and flat knobs.<sup>572</sup>

Type VII/5a

Similar to Type VII/5, but with curved neck.<sup>573</sup>

*Conical bowls with outturned rim (Types VII/6–9; Fig. 22)*

Type VII/6

Conical bowl with strongly outturned rim, low, indrawn neck and prominent shoulder.<sup>574</sup> The shoulder is occasionally decorated with knobs,<sup>575</sup> and the vessel body below the shoulder is sometimes rusticated.<sup>576</sup>

Type VII/6a

A more curved, deeper variant of the basic form, decorated with a small knob on the shoulder<sup>577</sup> and three small knobs on the rusticated body below the shoulder.<sup>578</sup>

<sup>566</sup> Oszlár–Nyárfaszög: *Koós* (1999) Fig. 4. 4.

<sup>567</sup> Kompolt–Kistér, Feature 7: *Gogáltan* (1999a) Pl. 16. 3.

<sup>568</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. XII. 7.

<sup>569</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. X. 7, Taf. XI. 2.

<sup>570</sup> Kompolt–Kistér, Feature 7: *Gogáltan* (1999a) Pl. 16. 1.

<sup>571</sup> Čaka: *Vladár* (1966) Abb. 14. 3; Jánosszállás–Katonapart: *Kürti* (1974) Fig. 3; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 8. 9; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. III. 3–4; Valea lui Mihai: *Roska* (1932) Fig. 8.

<sup>572</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. III. 3.

<sup>573</sup> Hódmezővásárhely–Égető B.-tanya: *Banner* (1939) Fig. 3. 1.

<sup>574</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 13. 5, 8, 12, Fig. 17. 2; Boldog–Vasútállomás: *Kalicz* (1998a) Fig. 14. 6, 11; Oszlár–Nyárfaszög: *Koós* (1999) Fig. 13. 2–5; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 9. 12, Fig. 12. 5; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. I. 6, Taf. X. 6, Taf. XI. 3, Taf. XII. 2, 5, 9.

<sup>575</sup> Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 9. 12.

<sup>576</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XII. 9.

<sup>577</sup> Kömlő–Szövetkezeti földek: *Pl. 3. 1*, in this volume.

<sup>578</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. III. 6.



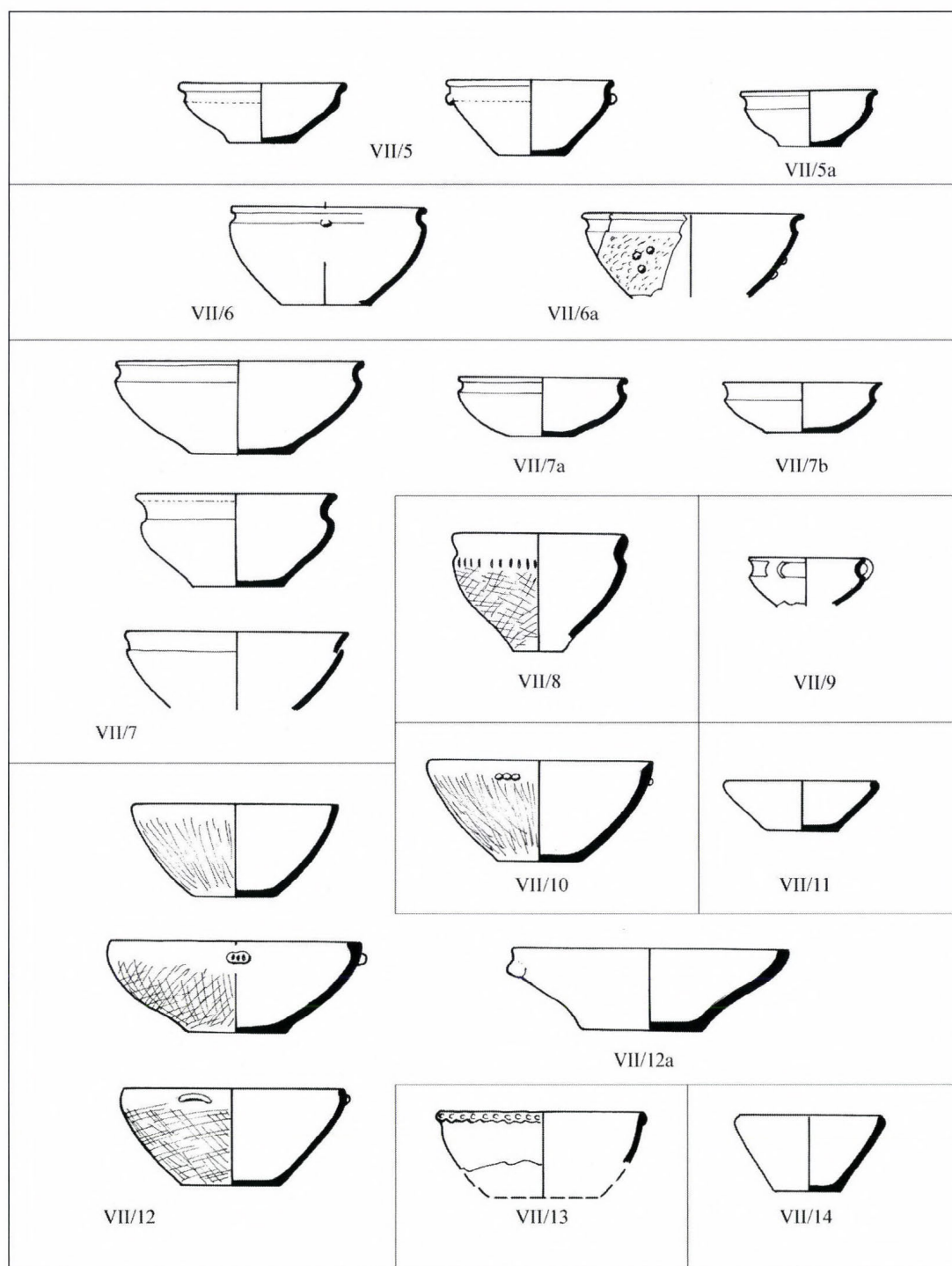


Fig. 22. Vessel types of the Makó-Kosihy-Čaka culture. Types VII/5–14: bowls

Type VII/5: Čaka, Tiszakürt–Homoki szőlő, VII/5a: Hódmezővásárhely–Solt-Palé, Égető Bálint-tanya, VII/6: Kömlő, Tiszalúc–Sarkadpuszta, VII/7: Tiszalúc–Sarkadpuszta, Hódmezővásárhely–Barci-rét, VII/7a: Kömlő, VII/7b: Hódmezővásárhely–Szakálhát, Diószegi Imre földje, VII/8: Tiszalúc–Sarkadpuszta, VII/9: Tiszalúc–Sarkadpuszta, VII/10: Tiszalúc–Sarkadpuszta, VII/11: Kajárpéc–Pokolfadomb, VII/12: Tiszalúc–Sarkadpuszta, Kömlő, Domony, VII/12a: Schwechat–Brauerei, VII/13: Tarnabod–Berekalja, VII/14: Domony

H. 4–8.5 cm

Type VII/7

Conical bowl with curved, outturned rim, low neck and sharp or rounded shoulder.<sup>579</sup>

Type VII/7a

A flatter variant of Type VII/7.<sup>580</sup>

Type VII/7b

Flat conical bowl with slightly outturned rim and low, curved neck. A flat knob is set on the shoulder (H. 5.5 cm).<sup>581</sup>

Type VII/8

Deep conical bowl with curved, outturned rim and low, curved neck. The shoulder is decorated with grooving, the vessel body is rusticated below the shoulder.<sup>582</sup>

Type VII/9

Conical bowl with curved neck, of which a handled variant can also be distinguished.<sup>583</sup> The shoulder is occasionally decorated with a row of impressions.<sup>584</sup>

*Conical bowls (Types VII/10–14; Fig. 22)*

Several variants can be distinguished in terms of rim and body forms. Many recall bowls of Types VII/3–4, although the rim is less thickened and the neck is virtually non-existent.

Type VII/10

Conical bowl with thickened in, oblique rim and no neck.<sup>585</sup> The most frequent type among the bowls from the Budapest–Aranyhegyi Road site, with smoothed, rusticated or combed surface.<sup>586</sup> Bowls of this type are often smoothed below the rim and rusticated from the shoulder down. A rib or knobs are sometimes set on the shoulder<sup>587</sup> or, more rarely, a small knob adorns the rim<sup>588</sup> and a small stringhole lug can be found below the rim.<sup>589</sup>

Type VII/11

Conical bowl with slightly thickened in rim.<sup>590</sup>

<sup>579</sup> Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. XII. 1; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. III. 5, Taf. VIII. 2, Taf. IX. 6.

<sup>580</sup> Kömlő–Szövetkezeti földek: *Pl.* 3. 3, in this volume; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 11. 5.

<sup>581</sup> Hódmezővásárhely–Diószegi-tanya: *Kalicz* (1968) Taf. II. 12.

<sup>582</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XV. 8; Csongrád–Sertéstelep: *Tóth* (2001b) Fig. 13. 3, 6, 8.

<sup>583</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. V. 10; Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 14. 4.

<sup>584</sup> Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1994) Abb. 10. 8.

<sup>585</sup> Mezőörs: *Figler* (1996a) Abb. 6. 14; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 9. 11; Táp–Borbapuszta: *Figler* (1994) Abb. 6. 2–4.

<sup>586</sup> Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1994) Abb. 8. 1, 4, 6, 8, 9, 10, 12, 13, Abb. 10. 3, 6, 10, Abb. 12. 8; and Malé Kosihiy: *Točík* (1961a) Abb. 5. 9.

<sup>587</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. I. 7, Taf. III. 7, Taf. VI. 5, Taf. IX. 7, Taf. XVIII. 2.

<sup>588</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. XVII. 7.

<sup>589</sup> Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1994) Abb. 8. 3.

<sup>590</sup> Kajárpéc–Pokolfadomb, Grave 3: *Figler* (1996a) Pl. III. 1.



#### Type VII/12

Curved conical bowl with straight rim.<sup>591</sup> The rim is sometimes decorated with finger impressions<sup>592</sup> or a knob.<sup>593</sup> Some pieces have a short finger-impressed rib below the rim below which the vessel body is rusticated.<sup>594</sup> Very rarely, the rim has a row of knobs and the vessel body is scored/brushed underneath it.<sup>595</sup>

#### Type VII/12a

Flat conical bowl with thickened in, oblique rim and a small knob below the rim.<sup>596</sup>

#### Type VII/13

Curved conical bowl with rounded rim, decorated with a short straight rib below the rim<sup>597</sup> or a finger impressed cordon around the rim.<sup>598</sup>

#### Type VII/14

Conical bowl with straight or oblique rim (H. 7–9 cm). Shallower<sup>599</sup> and deeper variants with steep sides are both known.<sup>600</sup>

### *Biconical bowls (Types VII/15–24; Figs 23–24)*

#### *Simple biconical bowls (Types VII/15–17; Fig. 23)*

#### Type VII/15

Biconical bowl with rounded or straight rim.<sup>601</sup> The carination, either prominent or rounded, extends around the vessel's middle third. Few intact or restorable pieces of this type are known. Bowls of this type are occasionally decorated with a short rib<sup>602</sup> or a knob on the rim.<sup>603</sup> A slender finger impressed cordon sometimes encircles the shoulder; the vessel body is smoothed above the cordon and rusticated underneath.<sup>604</sup>

<sup>591</sup> Mezőgyán–Gépműhely: G. Szénászký (1987–88) Fig. 11. 4; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. X. 1, Taf. XII. 3, 12, Taf. XVII. 4.

<sup>592</sup> Tápió-Borbapuszta: Figler (1994) Abb. 4. 6; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. XII. 3, 12.

<sup>593</sup> Budapest–Aranyhegyi Road: Kalicz-Schreiber (1994) Abb. 8. 14; Tápió-Borbapuszta: Figler (1994) Abb. 4.

<sup>594</sup> Kömlő–Szövetkezeti földek: Pl. 3. 4, in this volume.

<sup>595</sup> Domony: Kalicz (1968) Taf. V. 13.

<sup>596</sup> Schwechat–Brauerei, Grave: Ruttkay (1995a) Abb. 32. 5.

<sup>597</sup> Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. V. 7.

<sup>598</sup> Tarnabod–Berekalja: Kalicz (1998a) 11, Fig. 8. 4, Fig. 10. 14.

<sup>599</sup> Malé Kosihiy: Točík (1961a) Abb. 6. 3; Nové Zámky: Vladár (1966) Abb. 20. 1.

<sup>600</sup> Domony: Kalicz (1968) Taf. V. 10; Üllő–Site 5: Kővári–Patay (2005) Fig. 29. 1.

<sup>601</sup> Abda–Hármasok: Figler (1996a) Pl. II. 7; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. III. 3, Taf. V. 11, Taf. VII. 6, Taf. VIII. 10, Taf. X. 8, Taf. XII. 8.

<sup>602</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. VII. 6, Taf. X. 8.

<sup>603</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. V. 11.

<sup>604</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. X. 3.

#### Type VII/16

Shallow bowl with rounded rim, conical shoulder and conical lower half. The carination extends around the vessel's middle/lower third. The type has so far only been found in the Little Hungarian Plain.<sup>605</sup>

#### Type VII/17

Biconical bowl with slightly thickened out rim. The carination extends around the vessel's middle/lower third.<sup>606</sup>

### *Biconical bowls/mug-like vessels with low neck (Types VII/18–24; Figs 23–24)*

#### Type VII/18

Deep biconical bowl with slightly outturned thickened rim and low indrawn neck. The shoulder is short, the shoulder line extends around the vessel's upper third. A variant with steeper sides was more widespread,<sup>607</sup> while a deeper variant is known also from the western fringes of the Makó–Kosihy–Čaka distribution.<sup>608</sup>

#### Type VII/19

Wide-mouthed, flattish, biconical bowl with thickened rim and indrawn neck. The shoulder is short, the shoulder line extends around the vessel's upper third. The vessel surface is occasionally treated with both smoothing and roughening,<sup>609</sup> and a longish rib is sometimes set on the shoulder.<sup>610</sup>

#### Type VII/19a

Handled variant of Type VII/19. A long, ribbed stringhole lug is set on the rim. The shoulder is smoothed and decorated with bundles of combed lines underneath.<sup>611</sup>

#### Type VII/20

Less wide-mouthed biconical bowl with low, indrawn or cylindrical neck. The shoulder line extends around the vessel's middle third.<sup>612</sup> A wider/shallower and a taller/deeper variant can be distinguished, with a height ranging between 6 cm and 12.3 cm. Variants with a more prominent and a gentler shoulder line are both known.<sup>613</sup> A smaller sized variant was found at the Tiszalúc settlement.<sup>614</sup>

The shoulder is often decorated with semi-circular or crescentic ribs, or with vertical triple ribs<sup>615</sup> and, very rarely, with simple flattened knobs.<sup>616</sup>

<sup>605</sup> Táp–Borbapuszta: *Figler* (1994) Abb. 6. 18.

<sup>606</sup> Abda–Hármasok: *Figler* (1996a) Pl. II. 6.

<sup>607</sup> Čaka: *Vladár* (1966) Abb. 14. 1.

<sup>608</sup> Schwechat: *Ruttkay* (1995b) Abb. 31. 5.

<sup>609</sup> Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1994) Abb. 11. 11; Mužla: *Kuzma–Hanuliak* (1990) Abb. 4. 2.

<sup>610</sup> Domony: *Kalicz* (1968) Taf. VI. 7, 11.

<sup>611</sup> Kajárpéc–Pokolfádomb, Grave 1: *Figler* (1994) Abb. 10. 5.

<sup>612</sup> Hódmezővásárhely–Diószegi-tanya: *Kalicz* (1968) Taf. II. 8; Magyarcsanak–Bökény: *Kürti* (1974) Fig. 16; Makó–Vöröskereszt: *Kalicz* (1968) Taf. II. 5; Üllő–Site 5: *Kővári–Patay* (2005) Fig. 29. 2.

<sup>613</sup> Pişcolt: *Németi* (1979) Fig. 2. 5, cp. Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 17. 3.

<sup>614</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. II. 4.

<sup>615</sup> Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1994) Abb. 10. 16; Jánosszállás–Katonapart: *Kürti* (1974) Fig. 2.

<sup>616</sup> Táp–Borbapuszta: *Figler* (1994) Abb. 4. 4.



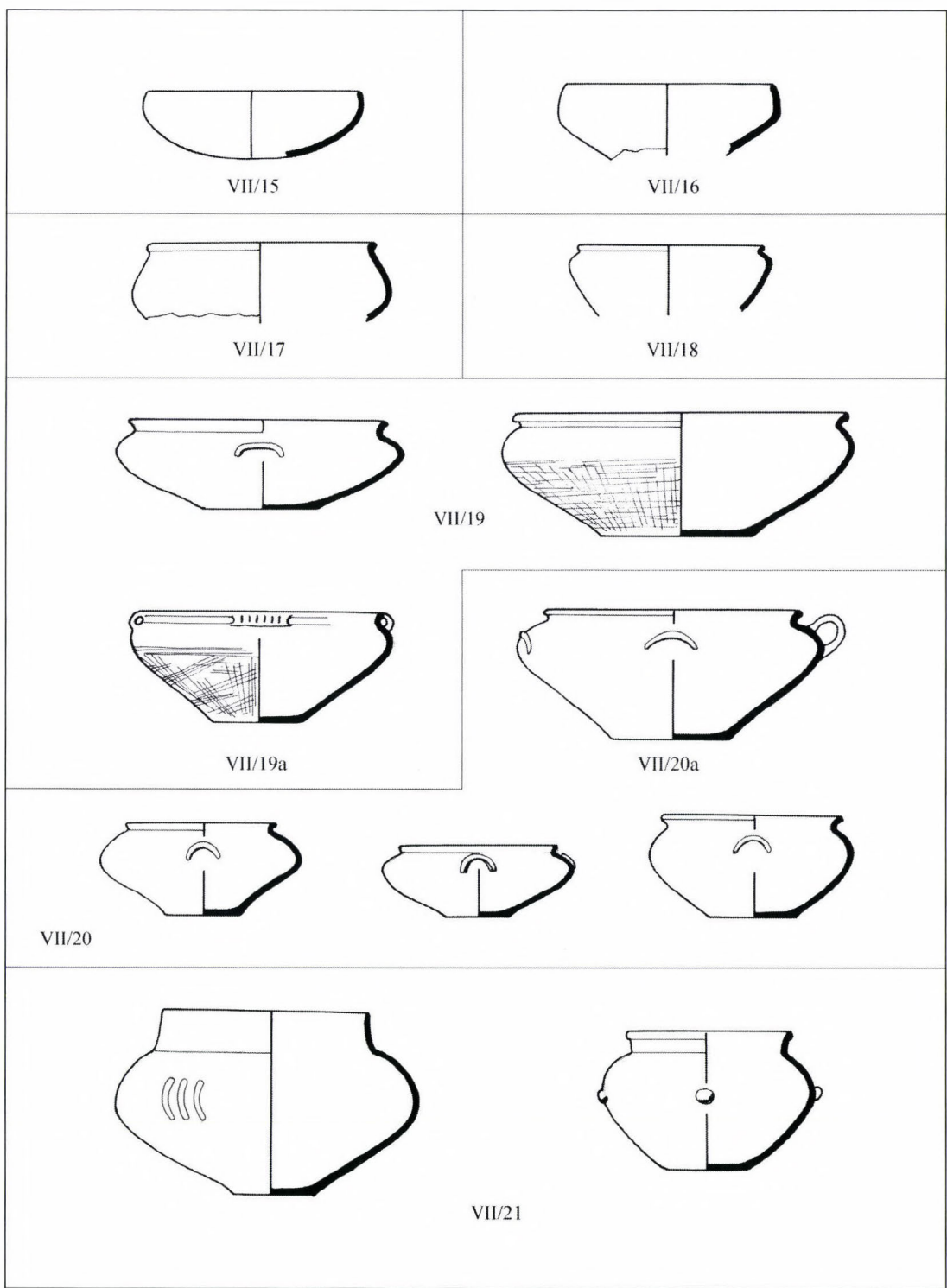


Fig. 23. Vessel types of the Makó-Kosihy-Čaka culture. Types VII/15–21: bowls

Type VII/15: Abda–Hármasok, VII/16: Táp–Borbapuszta, VII/17: Abda–Hármasok, VII/18: Schwechat, VII/19: Domony, Budapest–Aranyhegyi Road, VII/19a: Kajárpéc–Pokolfádomb, Grave 1, VII/20: Makó–Vöröskereszt, Hódmezővásárhely–Szakálhát, Diószegi Imre földje, Pişcolt–Nişipărie, VII/20a: Budapest–Aranyhegyi Road, VII/21: Jánosszállás–Katonapart, Tiszalúc–Sarkadpuszta

H. 7–12.5 cm

#### Type VII/20a

Handled variant of Type VII/20. The handle is set on the shoulder (H. 11 cm). The shoulder is decorated with symmetrically set crescentic ribs. This variant has so far only been found in the Budapest area.<sup>617</sup>

#### Type VII/21

Biconical bowl with rounded carination (H. 9.6–13 cm).<sup>618</sup> A vertical triple rib<sup>619</sup> or four short horizontal ribs or knobs<sup>620</sup> are set on the carination. The shoulder is generally decorated with a crescentic rib.<sup>621</sup>

#### Type VII/22

Biconical bowl with low, cylindrical neck and conical shoulder. The carination runs around the vessel's middle third. A pair of strap handles is set on the shoulder. A singular piece is decorated with eight symmetrically set vertical ribs on the strongly rounded shoulder.<sup>622</sup>

#### Type VII/22a

A variant of Type VII/22, decorated with a cordon encircling the shoulder between the handles. This variant is known from the culture's Lower Austrian distribution.<sup>623</sup>

#### Type VII/23

Steep-sided biconical bowl with thickened rim, low, indrawn neck and conical shoulder (H. 7.5 cm). A longish stringhole lug is set on the carination. This variant has so far only been recovered from the burial at Budapest–Aranyhegyi Road.<sup>624</sup>

#### Type VII/24

Biconical bowl with slightly outturned rim, indrawn neck and rounded shoulder.<sup>625</sup> A similar piece is known from Pančevo/Pancsova–Donja varoš in the Banat, whose finds show strong affinities with the Makó–Kosihy–Čaka culture.<sup>626</sup>

#### *Deep bowls (Types VII/25–28; Fig. 24)*

The label deep bowls is used for larger vessels, which cannot be unambiguously categorised as bowls or pots. Most of the pieces in this category are unparalleled in the ceramic inventory of the

<sup>617</sup> Budapest–Budaörs Airfield (fragment): *Schreiber* (1972) Fig. 1. 2; Budapest–Aranyhegyi Road (burial): *Kalicz-Schreiber* (1994) Abb. 3. 1.

<sup>618</sup> Budapest–Aranyhegyi Road: *ibidem* Abb. 9. 10. A larger variant is known from Györszemere–Tóth tag: *Figler* (1994) Abb. 7. 10.

<sup>619</sup> Jánosszállás–Katonapart: *Kürti* (1974) Fig. 5.

<sup>620</sup> Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. VI. 4, Taf. XVII. 1.

<sup>621</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. XV. 7; Üllő–Site 5: *Kővári-Patay* (2005) Fig. 28. 3.

<sup>622</sup> Kajárpéc–Pokolfadomb, Grave 1: *Figler* (1994) Abb. 10. 8. For a similar vessel, cp. Kamenín, Pit 26/77: *Nevizánsky* (2001) Tab. III. 1.

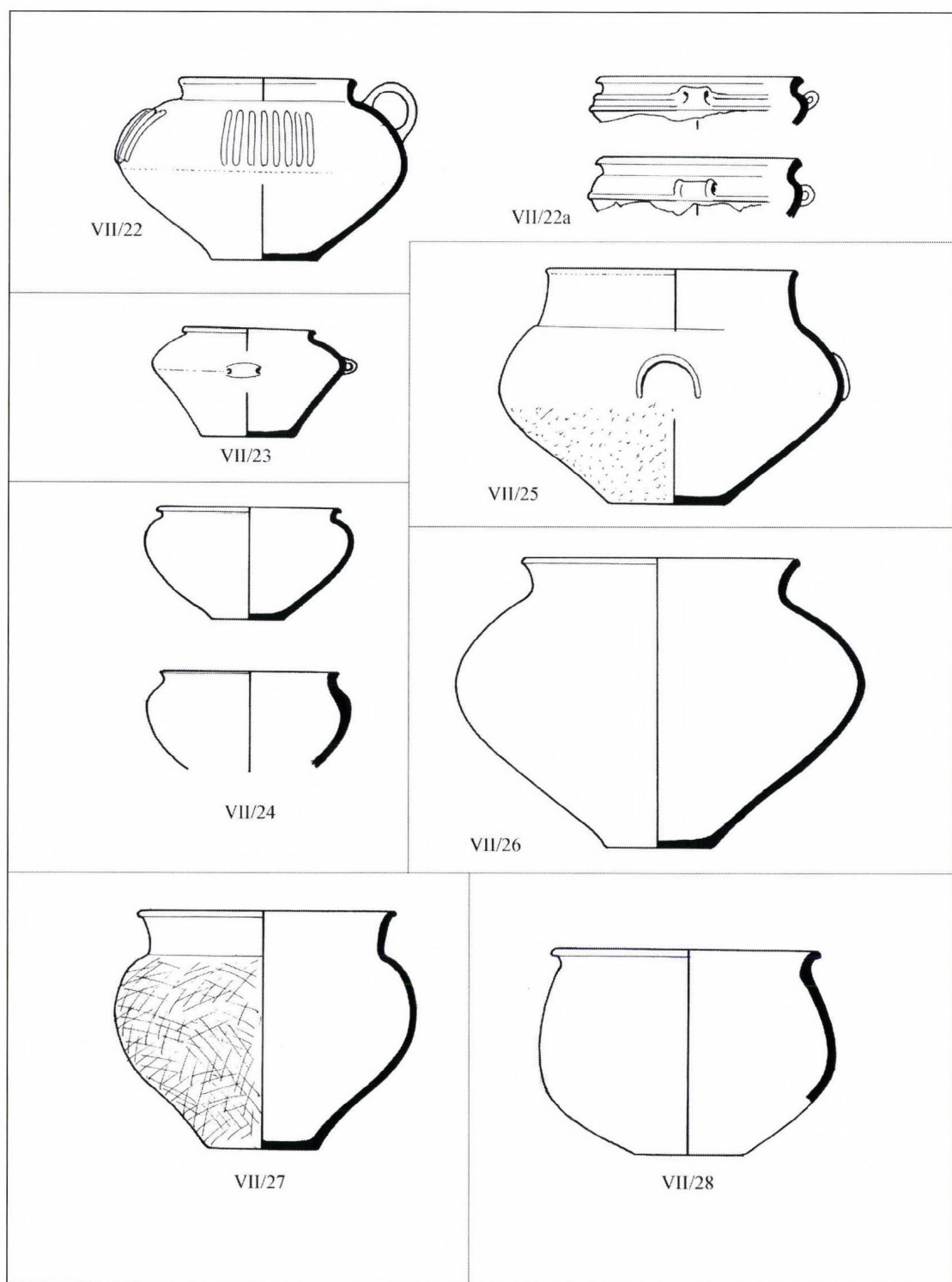
<sup>623</sup> Schleimbach: *Ruttikay* (1995b) Abb. 31. 3–4. Two fragments from Pit II/5 of the Budapest–Aranyhegyi Road settlement perhaps came from similar vessels: *Kalicz-Schreiber* (1994) Abb. 9. 3, 5. Cp. also the early Nagyrév rib-decorated vessels from Dunaföldvár–Kálvária: *Szabó* (1992) Pl. VII. 12–13; *idem* (1994) Abb. 2. 12–13.

<sup>624</sup> *Kalicz-Schreiber* (1994) Abb. 3. 2.

<sup>625</sup> Kompolt–Kistér, Feature 7: *Gogáltan* (1999a) Pl. 16. 6; Pişcolt, Grave: *Németi* (1979) Fig. 3. 4; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XII. 1.

<sup>626</sup> *Grčki-Stanimirov* (1996) T. II. 5.





*Fig. 24. Vessel types of the Makó-Kosihy-Čaka culture. Types VII/22–28: bowls*  
 Type VII/22: Kajárpéc–Pokolfadomb, VII/22a: Schleinbach, VII/23: Budapest–Aranyhegyi Road,  
 VII/24: Pişcolt–Nişipărie, Tiszalúc–Sarkadpuszta, VII/25: Debrecen–Köntöskert, 30 Bezerédj Street,  
 VII/26: Makó–Vöröskereszt, VII/27: Hódmezővásárhely–Solt-Palé, Égető Bálint-tanya,  
 VII/28: Tarnabod–Berekalja  
 H. 7.5–29 cm

Makó-Kosihy-Čaka culture. Types VII/26–27 have so far only been found in the southerly areas of the Great Hungarian Plain.

Type VII/25

Tall biconical dish with cylindrical neck and rounded carination (H. 26.5 cm). A specimen decorated with a crescentic rib on the shoulder was found among the grave pottery of the inurned burial at Debrecen–Köntöskert.<sup>627</sup>

Type VII/26

Wide-mouthed, squat biconical dish with low, flaring neck (H. 29 cm). The carination runs around the vessel's middle third.<sup>628</sup>

Type VII/27

Large biconical dish with curved, flaring neck and rounded shoulder (H. 23.5 cm). The neck is smoothed, the vessel body underneath is rusticated.<sup>629</sup> Comparable vessels are known from the Somogyvár–Vinkovci sites in the Srem.<sup>630</sup>

Type VII/28

Wide bowl with curved outturned rim, conical shoulder and prominent carination.<sup>631</sup>

*Miscellaneous bowls (Types VII/29–32; Fig. 25)*

Type VII/29

Deep, wide bowl with cylindrical neck and rounded shoulder (H. 13 cm).<sup>632</sup> The shoulder is occasionally decorated with a short rib.

Type VII/30

Wide-mouthed handled bowl with curved neck and conical lower part. The two handles springing from the rim are set opposite each other. A lower variant is known from Mužla. An infrequent type.<sup>633</sup>

Type VII/31

Deep, wide-mouthed bowl with curved profile (H. 12 cm), decorated with a short rib on the shoulder. The single known piece comes from the Mezőgyán settlement.<sup>634</sup>

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<sup>627</sup> Némethi–Dani (2001) Fig. 9. 3.

<sup>628</sup> Makó–Vöröskereszt, Grave: Kalicz (1968) Taf. II. 7. Kalicz (1984a) 96, Taf. XXII. 8, assigned the vessel to the category of bowls.

<sup>629</sup> Hódmezővásárhely–Égető B.-tanya: Banner (1939) Fig. 4. 1. Kalicz (1984a) 96, Taf. XXII. 4, assigned the vessel to the category of bowls.

<sup>630</sup> Vinkovci: Dimitrijević (1982a) T. 5. 5; Tasić (1984) Taf. IV. 9; Ilok: Tasić (1984) Taf. II. 8.

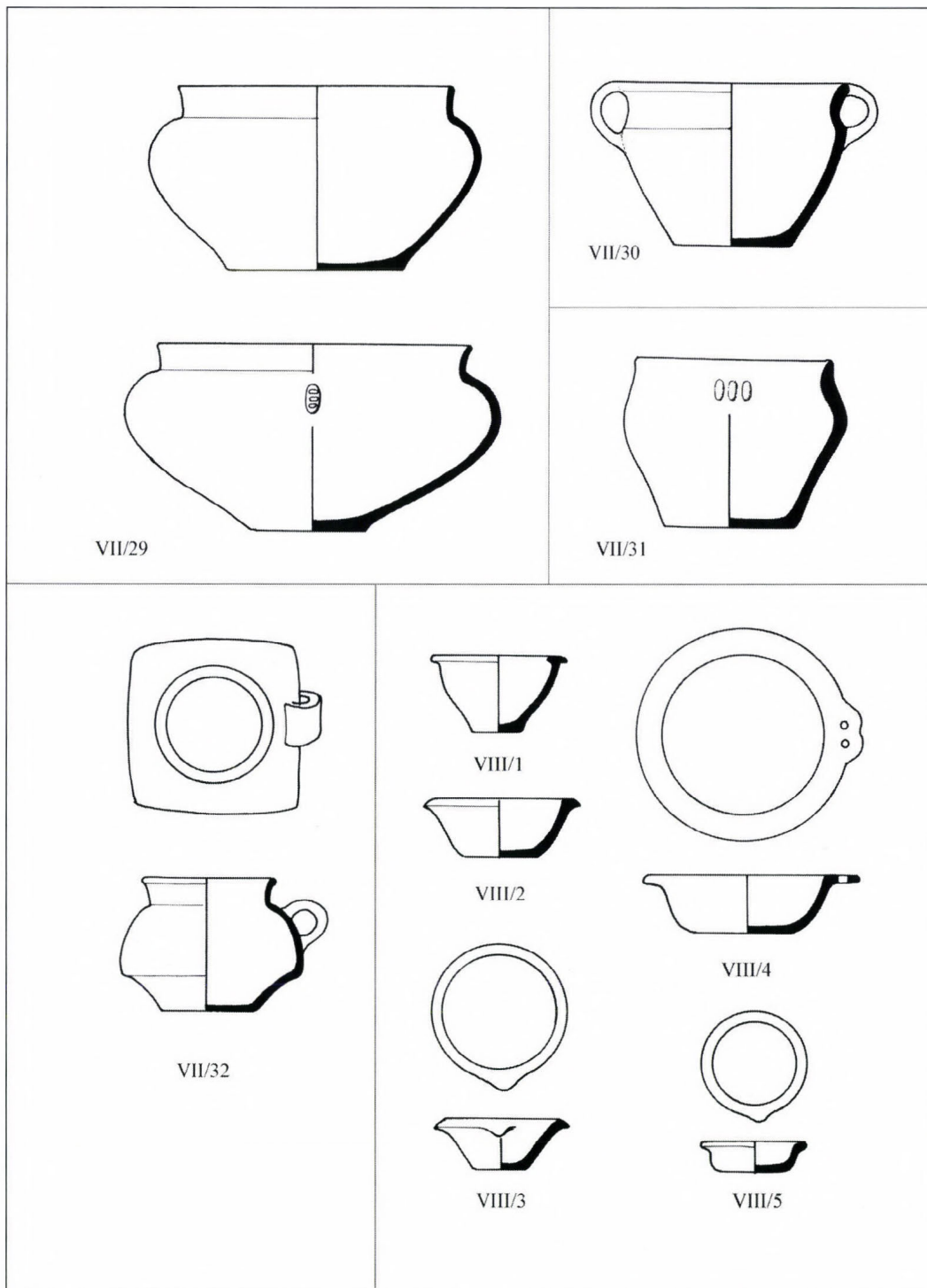
<sup>631</sup> Tarnabod–Berekalja: Kalicz (1998a) Fig. 12. 4.

<sup>632</sup> Hódmezővásárhely–Diószegi-tanya: Kalicz (1968) Taf. II. 13; Jánosszállás–Katonapart: Kürti (1974) Fig. 9.

<sup>633</sup> Mužla: Kuzma–Hamuliak (1990) Abb. 4. 3; Tápió-Borbapuszta: Figler (1994) Abb. 4. 7.

<sup>634</sup> Mezőgyán–Gépműhely: G. Szénászký (1987–88) Fig. 10. 7.





*Fig. 25. Vessel types of the Makó-Kosihy-Čaka culture*

Types VII/29–32: bowls and Type VIII: small conical bowls

Type VII/29: Hódmezővásárhely–Szakálhát, Diószegi Imre földje, Jánosszállás–Katonapart,

VII/30: Táp–Borbapuszta, VII/31: Mezőgyán–Gépműhely, VII/32: Tata–Tófarok;

Type VIII/1: Kömlő, VIII/2: Mezőgyán–Gépműhely, VIII/3: Budapest–Aranyhegyi Road,

VIII/4: Budapest–Budaörs Airfield, VIII/5: Táp–Borbapuszta

H. 2.8–13 cm

Type VII/32

Bowl with low, conical neck, curved, conical shoulder and angular body. A strap handle is set on the shoulder. A rare type, encountered only in burials so far.<sup>635</sup>

VIII. Small conical bowls (Fig. 25)

Small conical bowls (H. ca. 2–5 cm) with straight or slightly oblique rim are infrequent in the Makó–Kosihy–Čaka distribution. No vessels of this type were known at the time the first overviews of the culture's pottery were published. In addition to the traditional conical type (Fig. 25. VIII/1–3), a specimen with a straight, doubly perforated rim was found on the Budapest–Budaörs Airfield settlement (Fig. 25. VIII/4),<sup>636</sup> while a squatter variant with straight walls was brought to light from Pit M at Táp–Borbapuszta (Fig. 25. VIII/5).<sup>637</sup>

This bowl type has so far been found exclusively on settlements or in contexts suggesting a settlement: Mezögyán–Gépműhely<sup>638</sup> and Szeghalom–Környe<sup>639</sup> in the southern part of the Great Hungarian Plain; Kömlő (Pl. 3. 2), Tiszapüspöki–Karancs<sup>640</sup> in the northern part of the Great Hungarian Plain, Budapest–Aranyhegyi Road,<sup>641</sup> Budapest–Budaörs Airfield and Üllő–Site 5<sup>642</sup> in the Budapest area, Táp–Borbapuszta and Mosonszentmiklós–Gyepföldek-dűlő<sup>643</sup> in the Little Hungarian Plain, and Sládkovičovo in south-western Slovakia.<sup>644</sup>

The bowl from the Sládkovičovo settlement was found together with the typical Makó–Kosihy–Čaka wares of Slovakia, while at Budapest–Aranyhegyi Road it lay among the grave goods of a late Makó–Kosihy–Čaka burial. The find context of the specimens from Táp and Budapest–Budaörs Airfield are not known, but it seems likely that they had been found together with other Makó–Kosihy–Čaka wares.

The bowl from Mezögyán was recovered from a pit predominantly containing Makó–Kosihy–Čaka finds.<sup>645</sup> At the same time, a similar bowl from Szeghalom was found together with a handled mug of the type uncommon in the Makó–Kosihy–Čaka culture,<sup>646</sup> whose analogies can be quoted from Radanovac, a site assigned to the Somogyvár–Ada group,<sup>647</sup> and the stray vessel finds from Pişcolt.<sup>648</sup> The other pottery vessels, namely a mug and a pot from Szeghalom,<sup>649</sup> have good analogies among Makó–Kosihy–Čaka wares, suggesting that the pit and its finds can be assigned to the Makó–Kosihy–Čaka culture and, also, that the two similar bowls can be dated to the Makó–Kosihy–Čaka period. It seems likely that the finds from Szeghalom were deposited during the late phase of the Makó–Kosihy–Čaka culture.

<sup>635</sup> Tata–Tófarok: Kalicz–Schreiber (1991) Abb. 13. 5a–b.

<sup>636</sup> Schreiber (1972) Fig. 1. 10; Kalicz (1984a) Taf. XXIII. 11.

<sup>637</sup> Figler (1994) Abb. 5. 12.

<sup>638</sup> G. Szénászký (1987–88) Fig. 11. 3.

<sup>639</sup> *Ibidem* Fig. 11. 2.

<sup>640</sup> Csányi–Cseh–Tárnoki (2002) Fig. 3. 2.

<sup>641</sup> Kalicz–Schreiber (1994) Abb. 4. 2.

<sup>642</sup> Kővári–Patay (2005) Fig. 38. 4.

<sup>643</sup> Aszt (2001) Pl. I. 3.

<sup>644</sup> Vladár (1969) Obr. 8. 4, 10.

<sup>645</sup> G. Szénászký (1987–88) Fig. 10, Fig. 11. 1a–b, 4.

<sup>646</sup> *Ibidem* Fig. 8. 1.

<sup>647</sup> Horváth (1984a) Tab. II. 1.

<sup>648</sup> Némethi (1996) Fig. 7. 8.

<sup>649</sup> G. Szénászký (1987–88) Fig. 8. 2, 4, 6.



The widespread use of conical bowls in various cultures of Transdanubia and the Carpathian Basin can most likely be derived from the small decorated conical bowls of the Vučedol–Zók culture.<sup>650</sup> The plain, undecorated variants of these bowls appear in both Somogyvár–Vinkovci and Makó–Kosihy–Čaka assemblages. Interestingly enough, they are absent from the ceramic inventory of the Roşia and Nyírség groups, even though these groups demonstrably maintained contact with the Makó–Kosihy–Čaka and Somogyvár–Vinkovci cultures. At the same time, comparable bowls appear in the Bell Beaker assemblages from the Budapest area<sup>651</sup> and among the grave goods of an early Nagyrév burial.<sup>652</sup> Similar conical bowls have also been found on late Corded Ware sites in Moravia.<sup>653</sup> In fact, the regional distribution of these bowls shows a definite concentration in Moravia and they were formerly described as “Moravian bowls”, whose appearance in that region was explained by cultural connections with the south.<sup>654</sup> The bowl is less frequent in the Bohemian and southern German distribution of the Corded Ware culture,<sup>655</sup> and it is entirely lacking from the late Eneolithic and Early Bronze Age assemblages of Little Poland and the Ukraine from beyond the Carpathians.

In the south, a small bowl of this type was found in one of the Bela Crkva burials of the Belotić–Bela Crkva group<sup>656</sup> and similar pieces are known from Phase III of the Ljubljana/Laibach culture.<sup>657</sup> The use of these bowls appears to have been continuous from an earlier period on the Ig settlement, the difficulties of dating the finds from this site notwithstanding.<sup>658</sup>

The variants of small conical bowls were thus distributed from the northern Balkans to Moravia and their use can be noted from the late Vučedol period to the Bell Beaker/early Nagyrév/early Cetina period, suggesting that these bowls can be regarded as chronological markers of a specific period, whose variants, distributed across extensive regions, appeared during various chronological horizons.

#### *IX. Interior decorated footed bowls (Figs 26–30)*

Interior decorated footed bowls were one of the most typical pottery wares of the late Vučedol, the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures, all of which were distributed in the Carpathian Basin during the initial phase of the Early Bronze Age.<sup>659</sup> Several studies have been devoted to the appearance and spread of these bowls, as well as to their chronology and the cultural interpretation of their use. In terms of its typology, this bowl type is a chronological marker of the late Eneolithic/Early Bronze Age; it is also a hallmark of the period’s informal and formal cultural networks owing to its widespread distribution and its diverse forms. Shaft-hole axes played a similar

<sup>650</sup> Zók: *Ecsedy* (1983a) Pl. II. 3; Vučedol: *Schmidt* (1945) Taf. 42. 2, 3.

<sup>651</sup> *Schreiber* (1972) Fig. 4. 3a–b; Szigetszentmiklós–Üdülősor, Pit 146: *Endrődi* (1992) Fig. 62. 8; *Kalicz–Schreiber–Kalicz* (1999) Fig. 13. 2.

<sup>652</sup> Budapest–Békásmegyer: *Schreiber* (1972) Fig. 4. 3.

<sup>653</sup> *Buchvaldek* (1966) Abb. 4/D; *idem* (1981a) Taf. 4. 6–7.

<sup>654</sup> Šebela suggested the possible influence of the Makó–Kosihy–Čaka culture in connection with a small conical bowl found together with a Letonice type jug in Grave 7 at Krumvíř, a site lying on the south-eastern fringes of the Moravian Corded Ware distribution: *Šebela* (1981a) Abb. 2. 8; *idem* (1981b) 184.

<sup>655</sup> *Buchvaldek* (1966) Abb. 1; *idem* (1986).

<sup>656</sup> *Garašanin* (1958); *idem* (1982) Fig. 29. 9.

<sup>657</sup> *Govedarica* (1989a) Fig. 8. 5.

<sup>658</sup> *Korošec–Korošec* (1969) T. 68.

<sup>659</sup> The pieces dating from the early period of this widespread and popular bowl type, such as the pieces from the Late Copper Age/Eneolithic and the Vučedol, Cham, Jevišovice, Mödling–Zöbing and Řivnáč cultures, are mentioned but briefly.



role during this period, as did the wide range of one-handled jugs slightly later. At the same time, regional and chronological variants can and should be distinguished within this broadly interpreted corpus of finds. Disregarding the early bowls of the late Eneolithic/Late Copper Age, any discussion of these bowls must address the following issues: (a) the typological, (b) the functional and (c) the chronological differences (as indicated by find contexts) between the interior decorated footed bowls of the late Vučedol, the Makó-Kosihy-Čaka and the Somogyvár-Vinkovci cultures (see also SV Type IX).

Interior decorated bowls have been found on late Vučedol settlements, in the Makó-Kosihy-Čaka distribution and on sites of the Somogyvár-Vinkovci culture. Bowls of this type have been recovered from both settlements and burials of the Makó-Kosihy-Čaka culture, while they are principally known from settlements, rather than from burials in the Somogyvár-Vinkovci culture. Most of the known pieces are stray finds from undocumented contexts; many were collected during systematic field surveys, but only few come from well observed contexts or closed features.<sup>660</sup> The cultural attribution is therefore often difficult, especially in the case of pieces found during field surveys, when the associated finds are mostly made up of household pottery fragments, such as cooking pots and plain bowls.

Interior decorated bowl have always played a key role in determining the cultural units of the Early Bronze Age in the Carpathian Basin. Based on the widespread popularity and distribution of the Vučedol-Laibach type footed bowl, Kalicz distinguished three major cultural groups (the Makó-Kosihy-Čaka, the Nyírség and the Vučedol group) in the Zók culture, the all-embracing cultural unit of the Early Bronze Age and suggested that all three had a more or less similar ancestry and a roughly synchronous development.<sup>661</sup> In his detailed typological analysis of this bowl type, Ecsedy rejected the existence of the Zók culture: based on the findings of his excavations in south-eastern Transdanubia, he drew a distinction between late Vučedol and post-Vučedol interior decorated footed bowls, assigning the pieces of the Makó-Kosihy-Čaka group ("Makó group") to the latter.<sup>662</sup>

In her analysis of the still little known settlement patterns and distribution of the Somogyvár-Vinkovci culture in western Transdanubia, Kalicz-Schreiber distinguished three regional groups, each in a zone receiving different cultural impacts. She also discussed the typological differences between their pottery wares,<sup>663</sup> quoting the differences in the manufacture and use of interior decorated bowls: (a) a group distributed in the Alpine foreland characterised by the frequency of elaborately decorated bowls owing to cultural impacts from the Vučedol-Laibach group and the Rudina type; (b) a group distributed in south-western Transdanubia characterised by footed bowls decorated with a star motif; (b) and the interior decorated bowls popular in both the Makó-Kosihy-Čaka culture distributed in north-western Transdanubia and in the Somogyvár-Vinkovci culture, the latter associated with the finds from south-western Transdanubia.

In a recent study discussing one-handled jugs and mugs, Kalicz and Kalicz-Schreiber argued for two developmental phases in the Somogyvár-Vinkovci sequence, spanning the Early Bronze Age 1–2. In addition to various typological arguments, they also cited the ritual role of interior decorated

<sup>660</sup> The same holds true for interior decorated bowls representing different types and dating from different periods distributed from southern Germany to Moldavia and from Bohemia to Bulgaria. For recent overviews, cp. *Burger* (1980); *Schuster* (1995); see also *Kaiser* (2003) 282–288; *Kaiser-Nikitenko* (2003).

<sup>661</sup> *Kalicz* (1968) 62–105.

<sup>662</sup> *Ecsedy* (1979a) 106–107.

<sup>663</sup> *Kalicz-Schreiber* (1991) 9.



footed bowls, noting that their use in the Makó–Kosihy–Čaka and the early Somogyvár–Vinkovci cultures was restricted to the Early Bronze Age 1.<sup>664</sup>

Bondár distinguished two main types among the interior decorated bowls from the recently excavated Somogyvár–Vinkovci settlement at Börzönce–Temetői-dűlő: one with decoration solely in its interior, the other decorated on both the exterior and interior.<sup>665</sup> She noted that the latter was inspired by the both the Vučedol style and, possibly, the lingering influence of the Kostolac culture.

Interior decorated bowls assumed an important role in Central European Bronze Age studies too.<sup>666</sup> The problem of these bowls has been repeatedly addressed in the research of the late Eneolithic and the Early Bronze Age.

These bowls were first linked to various regional groups of the so-called “Slavonische Kultur”.<sup>667</sup> Paola Korošec divided the interior decorated footed bowls brought to light at Ig near Ljubljana into two main types: the Sarvaš–Zók type with a low, solid foot, and the Laibach type with a low, hollow foot.<sup>668</sup> Accepting this two-fold division, Evžen Neustupný identified six sub-variants of the “Laibacher Moor” type bowls based on their decoration.<sup>669</sup> Neustupný’s system soon came under critical fire,<sup>670</sup> and was refuted on each count by Ingrid Burger in the light of the interior decorated bowls found on sites of the Cham group in southern Germany. Burger assigned the various interior decorated bowl types to three chronological horizons based on chronologically and culturally well attributable pieces.<sup>671</sup> The first horizon (“Late Eneolithic culture province”, Kostolac–Vučedol I period) is marked by the earliest incidence of pieces decorated with cord impressions and concentric circles (Iža/Izsa type), as well as with pseudo-corded six-pointed star motifs (Ruma).<sup>672</sup> She assigned

<sup>664</sup> *Kalicz-Schreiber–Kalicz* (1997); *idem* (1999). Cp. also *Kalicz-Schreiber* (1991) 10; *idem* (1994) 40.

<sup>665</sup> *Bondár* (1995) 209, 233, Types T/9 and T/10.

<sup>666</sup> For earlier studies on the Austrian finds: *Kastner* (1939) Abb. 2–4, 131–134; *Willvonseder* (1939); *idem* (1940). Cp. also *Patay* (1938) 24–28, Taf. II. 1–2.

<sup>667</sup> *Novotný* (1955). Vladár later interpreted these groups as part of a larger “Eneolithic culture complex”: *Vladár* (1966). In spite of often widely differing ceramic inventories, the use of one or the other variant of interior decorated bowls was a shared feature of the Cham/Řivnáč/Jevišovice/Mödling–Zöbiling/Bošáca/Ig I/Vučedol/Kosihy–Čaka/Makó/Nyírség–Zátin cultures emerging from local cultural antecedents at the close of the Neolithic (“Endneolithikum”) in Austria, cp. *Ruttkay* (1981) 74.

<sup>668</sup> *Korošec* (1961).

<sup>669</sup> *Neustupný* (1966). Earlier, Točík invoked cultural impacts from the Vučedol culture (cross shaped foot, “Furchenstich” and cord impressed decoration) for the footed bowl (“Kreuzfusschüssel”) found at Iža/Izsa in a Kostolac context, and for the similar, cord impressed pieces from Abraham/Ábrahám, and Krížovany nad Dudvahom/Vágkeresztúr dated to the “Kostolac–Bošáca Mischhorizont”: *Točík* (1963) 12, 14. He felt that his assumption was confirmed by the occurrence of “Furchenstich” decoration on pottery from south-western Slovakia and the finds from the Bajč site: *Točík* (1961b) 342–343. He assigned the pottery found together with the footed bowl from Abraham, Patince and Krížovany nad Dudvahom to the Slovakian Kostolac–Baden culture, noting that in south-western Slovakia, the “Furchenstich” technique was predominantly used to decorate the footed bowls of the Kostolac–Bošáca group, which could be generally associated with the Vučedol culture: *Točík* (1964) 12, 158.

<sup>670</sup> *Němejcová-Pavúková* (1968); *Ruttkay* (1973). Němejcová-Pavúková assigned two bowls from Kostolac settlement at Iža to the footed bowls: “Fusschüsseln oder sog. slawonische Schüsseln”; *Němejcová-Pavúková* (1968) 406–408, Abb. 22, Abb. 27. 1. She quoted analogies to the cord impressed bowl from the Kosihy–Čaka culture (Branč/Berencs) and the rim fragments of the Bošáca culture found at Krížovany nad Dudvahom. Ruttkay assigned the bowls from Austria to five types: *Ruttkay* (1973) 39, 45–50, T. 8, Karte 1–2. Ruttkay’s typological system does not always correspond to the typology elaborated by *Neustupný* (1966) slightly earlier.

<sup>671</sup> *Burger* (1980).

<sup>672</sup> Two other stray finds are known from the Carpathian Basin: one comes from Branč–Arkuš (312); *Vladár* (1973) Obr. 70. 1; the other from Nagyhalász–Királyhalom: *Kalicz* (1968) Taf. I. 18. Bowls with a slightly



the bowls, which could not be attributed to either the Iža or the Sotin type to the middle horizon (Vučedol II/Ig I/Makó–Kosihy–Čaka/Bošáca II/Jevišovice B/Řivnác/late Cham) and did not assume any chronological differences. This is perhaps the greatest drawback of Burger's typological system, leading to some confusion. Cord impressed bowls (Melk and Podolie type), the Laibach type (low, hollow cross shaped foot, four-pointed star motif) representing the basic type of the Ig bowls with their varied patterns, the Čaka type with rectangular foot and chequered star motif, the round pedestalled Baranya type with chequerboard pattern, the Sarvaš type with solid cross shaped foot and richly ornamented exterior and interior, the Brno and Vysočany types adorned in a different spirit distributed in Moravia, the Zámka and Zlíchov type of Bohemia, the central German type bowls set on a tall round or pentagonal foot sharing many similarities with the Bohemian pieces, the Karst type, representing an independent variant, and the Montenegro bowls foreshadowing late types all occur during the middle horizon. She assigned the Sotin type to the post-Vučedol horizon. She linked the appearance of interior decorated bowls to the western expansion of the Yamnaya culture during the Gorodsk–Celei–Ezero II period.<sup>673</sup>

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Interior decorated bowls have been found on 194 sites of the Makó–Kosihy–Čaka culture, representing about one-half of the currently known 428 sites (*Fig. 26*). The regional distribution of sites is as follows: bowls came to light on about one-half of the 305 sites in Hungary (133 sites), on 41 of the 73 sites in Slovakia, on ten of the twenty sites in Austria, on one of the culture's twelve sites in Moravia, on two of the three sites in Serbian and on seven of the fifteen sites in Romania. Interior decorated bowls can be seen as one of the culture's typical wares, whose use can be documented on about one-half of the known sites;<sup>674</sup> a lower frequency can only be demonstrated in Moravia, lying on the fringes of the culture's distribution.

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different decoration (a semi-circular garland with cord impressions) have been reported from Křižovany nad Dudváhom (*Točík* [1963] 14, Obr. 9. 7a–c) and Šaľa: *Burger* (1980) 31, Fo. 51. This bowl type was earlier associated with the Yamnaya culture of the Ukraine: *Kalicz* (1968) 44; cp. *Kaiser* (2003) 282–288; *Kaiser–Nikitenko* (2003). The Podolie type (Praha–Bohnice, Riekofen, Pit 2) and the finds from Melk (*Willvonseder* [1940] T. I. 5–6) and Ruma (*Dimitrijević* [1956a] Tab. I. 8) were assigned to the middle horizon, in spite of the fact that the cord impressed decoration would fit in more with the early period: *Burger* (1980). The Ruma vessel is generally associated with the Yamnaya culture. Although the finds from Ruma include Kostolac and Vučedol pottery too, these finds were all stray pieces similarly to the bowl: *Dimitrijević* (1956a). The Ruma bowl is dated to the Vučedol I period, which overlaps with the Kostolac period, cp. *Dimitrijević* (1982a); *idem* (1982b).

<sup>673</sup> Ruttkay re-examined the bowls from Austria according to the typological framework proposed by Burger: *Ruttkay* (1995a). The bowls with solid cross shaped foot of the Sarvaš and Laibach type, corresponding to her earlier type 2, were mostly distributed in the Burgenland region (Deutschkreutz I–III, Illmitz, Jois, Mörbisch, Schützen am Gebirge); the finds associated with these bowls, however, are less well known. She assigned the variant with solid cross shaped foot (her earlier types 1 and 2: Melk, Mödling) to the Mödling–Zöbing/Jevišovice culture and the Laibach (Ig I)/late Vučedol period. She linked the Čaka type (her earlier type 3; Schwechat–Ölraffinerie, Sommerein, Grub an der March) to the Makó–Kosihy–Čaka culture. Bowls with a round, hollow pedestal are rare in Lower Austria (Schwechat–Bierkeller); Burger assigned this variant to the Baranya type and culturally linked it to the Transdanubian distribution of the Somogyvár–Vinkovci culture.

<sup>674</sup> The reason for the lack of evidence for the use of the bowl type on the other sites can in part be attributed to the fact that most are stray finds, in part to the extent to which finds assemblages have been published, and in part to differing chronological and cultural contexts.



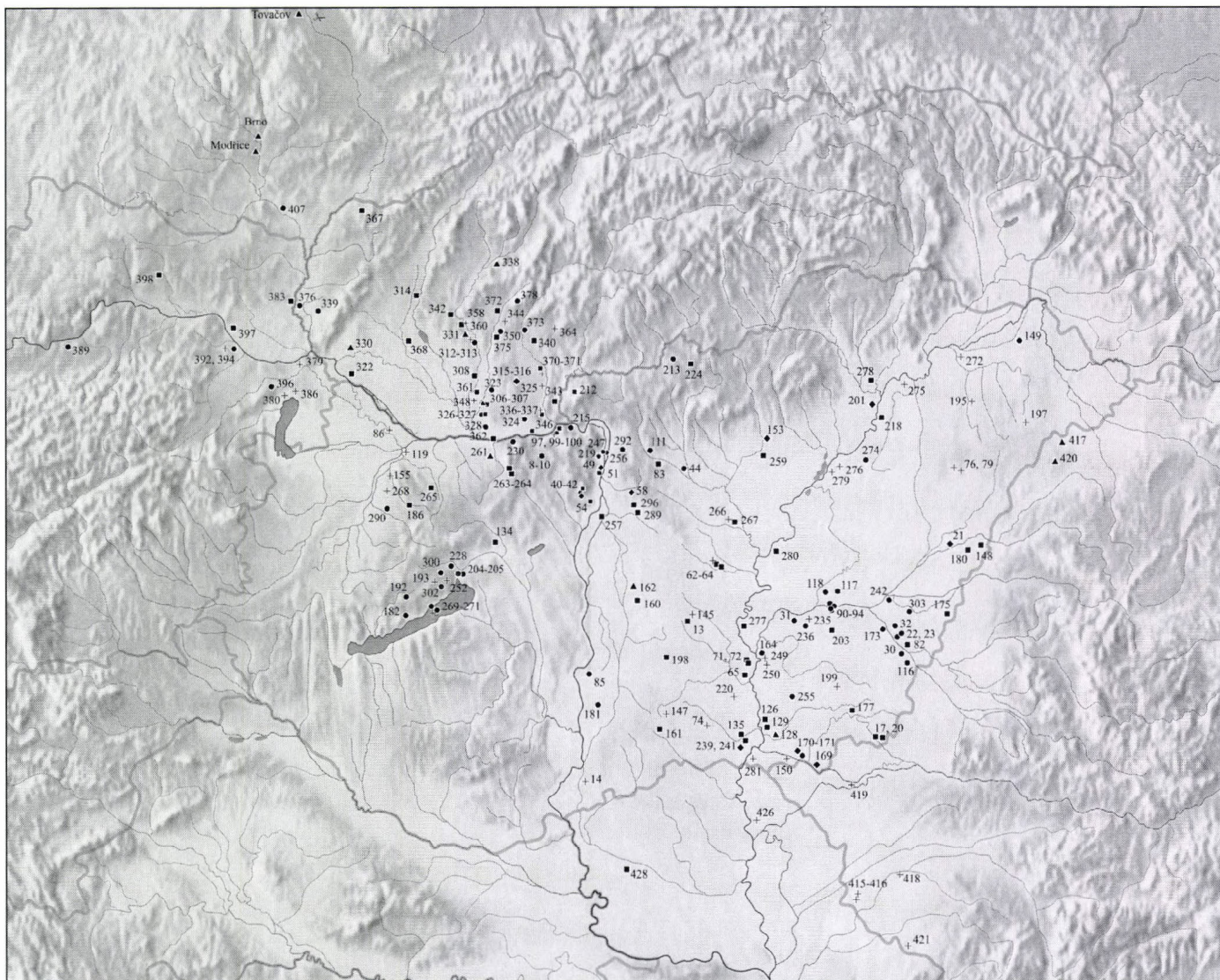


Fig. 26. Distribution of the interior decorated footed bowls (Type IX) of the Makó-Kosihy-Čaka culture  
 + stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial



The regional differences between the find contexts of the known bowls can be attributed to the extent a particular region has been researched.<sup>675</sup> Most bowl fragments were found in contexts suggesting a settlement site. The ceramic inventory from practically every excavated and published Makó-Kosihy-Čaka settlement in Hungary includes interior decorated bowl fragments,<sup>676</sup> which were mostly recovered from pits and occupation levels.<sup>677</sup> However, intact bowls are very rare.<sup>678</sup> Their frequency on a particular settlement and in pits too shows a wide variation. At Táp-Borbapuszta (265), for example, bowl fragments came to light from both excavated pits, while at Tiszakürt (277), only one of the five pits yielded a small fragment; at Tarnabod (259), restorable bowl fragments were found in two of the twelve pits. A similar ratio can be noted at Oszlár (201), where four of the twenty pits contained bowl fragments. In contrast, almost each pit of the Tiszalúc site (278) yielded interior decorated bowls and fragments of this ware occurred among the unstratified finds too. Bowl fragments often occur among the settlement finds recovered from occupation levels, as example at Battonya-Georgievics-tanya (17) and Battonya-Vörös Október Co-operative (20). The bowl fragments collected during field surveys are often used for the cultural attribution of a site within the Early Bronze Age. There has been an increase in the number of Early Bronze Age settlement sites indicated by finds of this ware collected in the systematically surveyed areas of the Hungarian Archaeological Topography project. Stray bowl finds are also known from caves (e.g. Bajna-Öreglyuk [9]).

Most of the intact or near-intact bowls come from graves. They were deposited in cremation<sup>679</sup> and inurned burials<sup>680</sup> alike, as well as in symbolic burials.<sup>681</sup> The assemblage of three to five vessels from Nemesvámos (193) probably came from a symbolic burial. We may perhaps regard stray finds of intact and barely damaged bowls as being the grave goods of destroyed burials.<sup>682</sup> Even though

<sup>675</sup> While fragments of interior decorated bowls are known from each region of the northern Transdanubian distribution of the Makó-Kosihy-Čaka culture, they are more frequent in the intensively researched areas, such as the Budapest area, the Little Hungarian Plain, Counties Veszprém and Zala (especially the former Veszprém district; MRT 1, 195; MRT 2, 267; MRT 3, 271), the Esztergom and Dorog districts of County Komárom-Esztergom (MRT 5, 9, 351–352), and the Szob and Vác districts of County Pest (MRT 9, 13, 571), all regions surveyed systematically as part of the Hungarian Archaeological Topography project. Even so, the number of securely datable closed grave assemblages and settlement features is very low.

<sup>676</sup> Although no interior decorated bowls were found at the Endrőd-Site 161: *Bondár* (1999).

<sup>677</sup> E.g. Battonya-Georgievics-tanya (17), Battonya-Vörös Október Co-operative (20), Budapest, III-Aranyhegyi Road, Mocsáros (49), Csongrád-Saroktanya (71), Domony-J. Roob's garden (83), Hódmezővásárhely-Barci-rét (126), Jánosszállás-Katonapart (135), Kunfehértó-Kovács-tanya (161), Mezögyán-Gépműhely (175), Oszlár-Nyárfaszög (201), Örménykút-Szilai-halom (203), Polgár-Nagy Kasziba (218), Tarnabod-Berekalja (259), Táp-Borbapuszta (265), Tiszakürt-Homoki szőlő (277), Tiszalúc-Sarkadpuszta (278).

<sup>678</sup> E.g. Nagydém-Felsőrépáspuszta (186).

<sup>679</sup> Budapest-Aranyhegyi Road, Mocsáros (49), Budapest-Péceli Road (58), Kompolt-Kistér, Grave 2 (153), Tata-Tófarok (261).

<sup>680</sup> Kunpeszér-Sinai-hegy (162), Magyarcsanád-Bökény (169/c), Szeged-Kiskundorozsma-Subasa (241).

<sup>681</sup> Hódmezővásárhely-Gorzsá-Kovács István-tanya (128), Makó-Vöröskereszt (171).

<sup>682</sup> Debrecen-Bellegelő 266 (76), Debrecen-Szövetkezeti szőlőtelep (79), Dunaszentpál-Bolgányi Road gravel pit (86), County Hajdú (120), Kecskemét-Szikra (145), Kiskunhalas-collection of the Reformed Gymnasium (147), Pusztaszer-Felsőpusztaszer A (220), County Szabolcs (233), Szarvas-Bolza kastély (235), Szentes-Jaksorpart (249). Near intact bowls are known from the Szentes area (250), Tiszabercel-Nagyret (272) and Tiszadada-Téglavető környéke (275). A fourth piece was probably found in the Tiszafüred area (276).



interior decorated bowls have been found in burials of the three main rites, they appear to have been more frequently deposited in scattered cremation and symbolic burials.<sup>683</sup>

In south-western Slovakia, bowls have chiefly been found on settlement sites. In contrast to the Hungarian settlements, little can be said about their frequency variations since only in a few cases have the find assemblages been published according to closed settlement features. Most of the stray finds probably come from settlement sites. Some intact pieces are known from this region too, principally from scattered cremation burials,<sup>684</sup> while fragmentary bowls have been found among the grave goods of mixed cremation<sup>685</sup> and symbolic burials.<sup>686</sup> The interior decorated bowl from Bešenov/Zsitvabesenýö–Malomgát, initially attributed to the Makó–Kosihy–Čaka culture,<sup>687</sup> is now assigned to the Bratislava type bowls of the Baden Ib/Boleráz period.<sup>688</sup>

In the culture's north-western distribution, the bowl type has been found in an assemblage from a closed settlement feature at Ziersdorf (398), in occupation levels on excavated settlements,<sup>689</sup> and as stray finds indicating settlement sites. The vessel was not deposited in burials. A few bowls whose cultural attribution is uncertain must be mentioned<sup>690</sup> together with the broken bowls from Deutschkreutz/Sopronkeresztúr, which may have been grave goods.<sup>691</sup>

In the lack of excavated settlements on the southern and eastern fringes of the Makó–Kosihy–Čaka distribution, most of the bowls from these areas are stray finds.<sup>692</sup> One bowl was recovered from an inurned burial at Pişcolt–Nişipărie, Grave 65 (420), another one from an inurned burial at Foeni–Fântâna Pășune (417). The other intact bowls from these areas<sup>693</sup> are likewise interpreted as grave goods from burials.

In sum, we may say that in addition to stray finds of interior decorated bowl fragments, many bowls of this type have been recovered from secure settlement and burial contexts of the Makó–Kosihy–Čaka culture. The functional analysis of these vessels indicates that interior decorated bowls, which appear in a wide range of cultural contexts over an extensive area, were most often deposited in burials in the Makó–Kosihy–Čaka distribution. Intact pieces have not yet been found on

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<sup>683</sup> *Kulcsár* (2002a) 454; *Tóth* (2002) 44.

<sup>684</sup> Čaka–Kopeck, Grave 8 (316).

<sup>685</sup> Ivanka pri Dunaji (330).

<sup>686</sup> Krásno–Kráčiny (338).

<sup>687</sup> *Janšák* (1931) 49, 51, Tab. XXII; cp. also *Novotný* (1955) 16; *Vladár* (1966) 255; *Burger* (1980) 29, Fo. 31.

<sup>688</sup> *Němejcová-Pavůková* (1981); *Bondár* (2002a). A Boleráz settlement was identified at Bešenov/Zsitvabesenýö–Dolní Ohaj in 1956: *Němejcová-Pavůková* (1964) 178–179.

<sup>689</sup> Wien–Aspern “Weber” (397), Přitluky–Fraumühle (407).

<sup>690</sup> Fragments of interior decorated bowls with uncertain date/cultural attributions are known from Au am Leithagebirge, stray find, Typ Sarvaš: *Willvonseder* (1939) 135, Abb. 1. 2; *Ruttkay* (1973) 41; Deutschkreutz I–III, stray finds: *Pittioni* (1947a) 49–54, Taf. 1. 1–2; *Ohrenberger* (1954); *idem* (1959) 20; *idem* (1971) 5; *Ruttkay* (1973) 44, T. 7. 1; *Hahnel* (1992) 86, note 31; Schützen am Gebirge–Wulkaäcker: *Nowak* (1974) Abb. 13; Wien–Aspern, Binder Gärtnerei: *Kastner* (1939) 123, Abb. 4. 3–4; Wien–Aspern-639/I plot of land: *Kastner* (1939) 129.

<sup>691</sup> A semi-intact bowl with interior decoration came to light when inhumation burials were disturbed in a sand-pit in 1944: *Pittioni* (1947a) 49–54, Taf. 1. 1–2; *Ruttkay* (1973) 44, T. 7. 1. It seems likely that the inhumation grave assigned to the Vučedol–Laibach complex by *Ohrenberger* destroyed in 1955 in the gravel-pit lay near these burials. The unpublished finds include the rim fragment of an interior decorated bowl: *Ohrenberger* (1959) 20; *idem* (1971) 5; *Hahnel* (1992) 86, note 31.

<sup>692</sup> Foeni–Cimitirul Orthodox (415), Foeni–Salaš (416), Parța (418), Stamora Moravița (421).

<sup>693</sup> Čoka (426), Periam (419).



settlements,<sup>694</sup> suggesting that beside their role as prestige items and ritual vessels, simpler versions of interior decorated bowls were also used in domestic contexts. However, the currently available finds do not allow a sharp distinction between the pieces found on settlements and the ones recovered from burials.

### Typology

The placement and style of the decoration and the form of the foot on the intact bowls and the pieces restorable from their fragments show the following regularities.

The placement of the decorative pattern was taken as a starting point in the analysis; a possible correlation between the decorative style and the form of the foot was also examined. Five variants could be distinguished as regards the placement of the decoration:

- (1) bowls decorated in the interior only;
- (2) bowls decorated in the interior and on the rim;
- (3) bowls decorated on the exterior, the interior and the rim;
- (4) bowls decorated on the rim and the foot;
- (5) undecorated bowls.

The most typical placement for the decoration on Makó–Kosihy–Čaka bowls in the culture's Hungarian distribution was the vessel interior. Pieces decorated in the interior and on the rim, or on the exterior, the interior and the rim were less frequent, while bowls decorated on the rim and the foot were quite rare, as were plain, undecorated bowls. Flat knobs were sometimes set under the rim.<sup>695</sup>

Similarly, bowls decorated in their interior only dominate in south-western Slovakia, while bowls with decorated interior and rim or bowls decorated on the exterior, interior and rim are much more rare. The cultural attribution of the interior decorated bowls from Austria is often uncertain. The pieces which can definitely be assigned to the Makó–Kosihy–Čaka culture include bowls decorated in their interior only and pieces decorated on their exterior, interior and rim. The bowl fragments from Moravia can be assigned to the variant with decorated interior, as can the fragments from the culture's southern and eastern periphery.

As regards the first three variants of decoration, the most widespread patterns have one to three lines running under the rim and around the bottom in the vessel interior. The area between them is generally divided into four triangles (a so-called star pattern) filled with a pattern of hatched triangles, a chequerboard pattern of hatched triangles, hatched triangles arranged in bands or an incised lattice pattern and their combinations. A pattern on the bottom between the main triangles is rare (usually made up of smaller triangles), as is the decoration of the rim interior. The motifs filling the triangles

<sup>694</sup> Little is known about the intra-site findspots and find contexts (e.g. pit fill) of interior decorated bowls or their relative frequency in the ceramic assemblage from a particular settlement. The little that is known would suggest that these bowls played an important, but not particularly prominent role in daily life. One of the interior decorated bowl fragments from the Budapest–Aranyhegyi Road site was recovered from a pit whose fill contained burnt daub fragments and organic substances: *Kalicz-Schreiber* (1994) 41. An almost intact bowl came to light together with body sherds of a mug, cooking pot and storage jar from a pit uncovered at Nagydém–Felsőrépáspuszta (*Ilon* [1995] 102) indicating that not only broken pieces, but virtually intact interior decorated bowls were sometimes discarded.

<sup>695</sup> E.g. Budapest–Aranyhegyi Road (49), Debrecen–Bellegelő 266 (76), Dunaszentpál–Bolgányi Road gravel pit (86).



set opposite each other is generally identical. A design differing from these general schemes is rare (Fig. 27. 6, Fig. 28. 2, Fig. 29. 4–5).

#### Type IX/1

Bowls decorated in the interior only.

The bowl fragments representing the variant with interior decoration from Hungary are typically decorated with a star motif (Fig. 27. 1–5, 7–9, Fig. 29. 1, 6–8, Fig. 30. 3)<sup>696</sup> and its variants a lattice pattern (Fig. 27. 9, Fig. 28. 6, Fig. 30. 9)<sup>697</sup> or a design arranged in bands (Fig. 28. 1, 5, Fig. 29. 2, Fig. 30. 2).<sup>698</sup> A few fragments with a roughly drawn pattern are also known (Fig. 27. 5, Fig. 28. 2).<sup>699</sup>

The bowls from south-western Slovakia most often bear a design of hatched triangles or lozenges enclosed within larger triangles.<sup>700</sup> The Austrian bowls decorated in their interior only are likewise

<sup>696</sup> The four large triangles making up the star motif are generally filled with a chequerboard pattern of hatched lozenges: Békésszentandrás–Pitye-gát (31), Bélmegyer–Fehér hát (32), Gyoma–Zichy Bala (118), Heves–Páptag (122), Hódmezővásárhely–Barci-rét (126), Jánosszállás–Katonapart (135), Kunfehértó–Kovács-tanya (161), Monoszló–Hegyesetető (182), Oszlár–Nyárfaszög (201), Örménykút–Szilai-halom (203), Pomáz–Új-dűlő (219), Szeghalom–Dióér (242), Szentkirályszabadja (252), Székkutas–Diófás-dűlő (255), Táp–Borbapuszta (265), Vaszar–Szilos (290), Veszprémfajsz–Királyhegysarok (302), Vésztő–Pányád (303); a design of hatched triangles alternating with empty areas: Domony–J. Roob’s garden (83), Mezőberény–Belenczéres (173), Miske–Telek (181), Polgár–Nagy Kasziba (218); a zoned design of hatched triangles: Perőcsény–Jancsi-hegy (212); and their combinations: Bajna–TSz major (10), Bátmonostor–Szurdokpart (14), Battonya–Vörös Október Co-operative (20), Budapest–Aranyhegyi Road (49), Csongrád–Saroktanya (71), Hódmezővásárhely–Gorza-Kovács István-tanya (128), Kecskemét–Szikra (145), Kompolt–Kistér, Grave 2 (153), Kunfehértó–Kovács-tanya (161), Kunpeszér–Sinai-hegy (162), Makó–Vöröskereszt (171), Nagydém–Felsőrépápuszta (186), Nemesvámos–Kasza-dűlő (193), Pusztaszer–Felsőpusztaszer A (220), Salgótarján–Pécskö (224), Süttő–Tatai úti-dűlő II (230), Szentendre–HÉV-végállomás (247), Tata–Tófarok (261), Tiszabercel–Nagyret (272), Tiszalúc–Sarkad (278), Szigetszentmiklós–Vízcsőárok II (257), and Periam (419), Pişcolt–Nişipărie (420), Čoka–Kremenýák (426); and with hatched triangles from Szeged–Kiskundorozsma-Subasa (241), Tarnabod–Berekalja (259).

<sup>697</sup> The triangles in the interior are occasionally filled with an incised lattice pattern, as on the fragments from Domony–J. Roob’s garden (83), Endrőd–Rihes-halom (94), Mezőgyán–Gépműhely (175), Szentes–Jaksorpart (249) and Tiszalúc–Sarkad (278). The lattice motif is rare in south-western Slovakia; only one single fragment is known from Nesvady–Pethágó (348).

<sup>698</sup> Debrecen–Bellegelő 266 (76), Endrőd–Bogárzó (90), Endrőd–Kocsorhegy (91), Hódmezővásárhely–Gorza-Kovács István-tanya (128), Hódmezővásárhely–Solt-Palé, Égető B.-tanya (129), Hódmezővásárhely–Szakálhát-Nagy Sándor földje (131), Kiskunhalas–collection of the Reformed Gymnasium (147), Magyarcsanak–Bökény (169/c), Tiszacsege–Sóskás (274). This pattern is rare in Slovakia, occurring on one fragment only: Záhorská Ves–Príbrzí (376).

<sup>699</sup> E.g. Boldog–Vasútállomás (44), Gerla–Törpe ér (116), Kiszombor–N (150), Koroncó–Galambostag (155), Tiszalúc–Sarkad (278), the Tiszafüred area (276), Salgótarján–Pécskö szikla (224), Tápiószele–Szkíta temető (267), Szeged–Kiskundorozsma-Subasa (Grave 234) (241), Táp–Borbapuszta (265), Tiszapüspöki–Karancs (280), Hurbanovo–Bacherov majer (326).

<sup>700</sup> Bajč–Vinohrady (307), Čaka–Kopec, Grave 8 (316), Malé Kosihy–Papföld (343), Nitriansky Hrádok–Zámeček (360). Larger fragments have been found at Bajč–Medzi kanálmi (306), Bajč–Vinohrady (307), Bánov (308), Branč (313), Dvory nad Žitavou (323), Ivanka pri Dunaji (330), Kamenín (336–337), Levice–Alsó rétek (340), Mužla–Čenkov (346), Pečenice–Vtáčník hill (364), Sládkovičovo (368), Vráble–Fidvar (375). Smaller fragments are known from Čaka–Diely medzi lúkami (315), Hronovce–Vozokany nad Hronom (325), Hurbanovo–sandmine (327), Krásno–Kráciny (338), Malé Kosihy–Papföld (343), Nové Zámky (361), Šarovce–former brick factory (370), Vráble–Fidvar (375).



generally ornamented with a hatched triangle or lozenge pattern,<sup>701</sup> as are the fragments from Moravia, all of which can be assigned to the variant with interior decoration only.<sup>702</sup> The bowl fragments from the eastern and southern fringes of the culture's distribution too represent this variant and are adorned with a chequerboard pattern.<sup>703</sup>

The currently known corpus of finds indicates that the star motif dominated the designs over the culture's entire distribution. Smaller variations can be noted in the quality and technique of the design, as well as the sophistication and variety of the ornamental repertoire. In addition to elaborate patterns made up of jabs and incised lines encrusted with lime, some bowls have a rather roughly incised pattern echoing the more finely drawn ones (*Fig. 29. 7*).<sup>704</sup> A fragment from Nyíregyháza–Morgó (195) has a pattern of hatched triangles created from incised lines imitating cord impressions, a rare piece in view of its decorative technique.

A more complex, rare variant of the triangle pattern filled with hatched lozenges comes from Tiszalúc–Sarkad (278): the larger lozenges enclose smaller lozenges and a row of dotted circles runs under the rim and around the bottom (*Fig. 30. 5*).

The number of intact or restorable bowls decorated in their interior only is low: only about twenty-five pieces are known from the 305 sites yielding such finds in Hungary. Most the interior decorated bowls were set on a round, hollow foot (*Fig. 27, Fig. 28. 2*),<sup>705</sup> more rarely on a low, solid foot-ring (*Fig. 28. 3*),<sup>706</sup> a low, hollow, curved, cross shaped foot (*Fig. 28. 5*),<sup>707</sup> a low, hollow, cross shaped foot (*Fig. 28. 6*),<sup>708</sup> or a rectangular, hollow foot (*Fig. 29. 1–3*).<sup>709</sup> A bowl set on four small feet is known from Szeged–Kiskundorozsma–Subasa (*Fig. 29. 4*).<sup>710</sup> One bowl lacks a foot part (*Fig. 29. 5*),<sup>711</sup> and the form of the foot is not known in a few cases (*Fig. 30. 2, 3*).<sup>712</sup>

<sup>701</sup> Bad–Deutsch Altenburg (379), Matzleinsdorf–Burgstalläcker (389), Schwechat–Bierkeller (392), Schwechat–Ölraffinerie (394). A bowl with a hollow, rectangular foot, decorated with a chequerboard pattern in its interior is known from Sommerein–“Kurzen Ellen“ in Austria (396).

<sup>702</sup> Přitluky–Fraumühle (407).

<sup>703</sup> Foeni–Cimitirul Orthodox (415), Foeni–Salaš (416), Foieni–Fântâna Pășunii (417), Parța (418), Stamora Moravița (421).

<sup>704</sup> Budapest–Aranyhegyi Road (settlement) (49), Budapest–Békásmegyer (Buváti) (51), Iszkaszentgyörgy (134).

<sup>705</sup> Bátmonostor–Szurdokpart (14), Budapest–Aranyhegyi Road (49), Kompolt–Kistér, Grave 2 (153), Kunfehértó–Kovács-tanya (161), Magyarcsanak–Bökény (169/c), Nagydém–Felsőrépápuszta (186), Nemesvámos–Kasza-dűlő (193), Pusztaszer–Felsőpusztaszer A (220), Szeged–Kiskundorozsma–Nagyszék I. (239), Szentes–Jaksorpart (249), Tiszabercel–Nagyvér (272). In Hungary, this variant often occurs among the grave vessels.

<sup>706</sup> Bajna–TSz major (10), Tiszapüspöki–Karancs (280).

<sup>707</sup> Debrecen–Bellegelő 266 (76).

<sup>708</sup> Makó–Vöröskereszt (171), Čoka–Kremenyák (426).

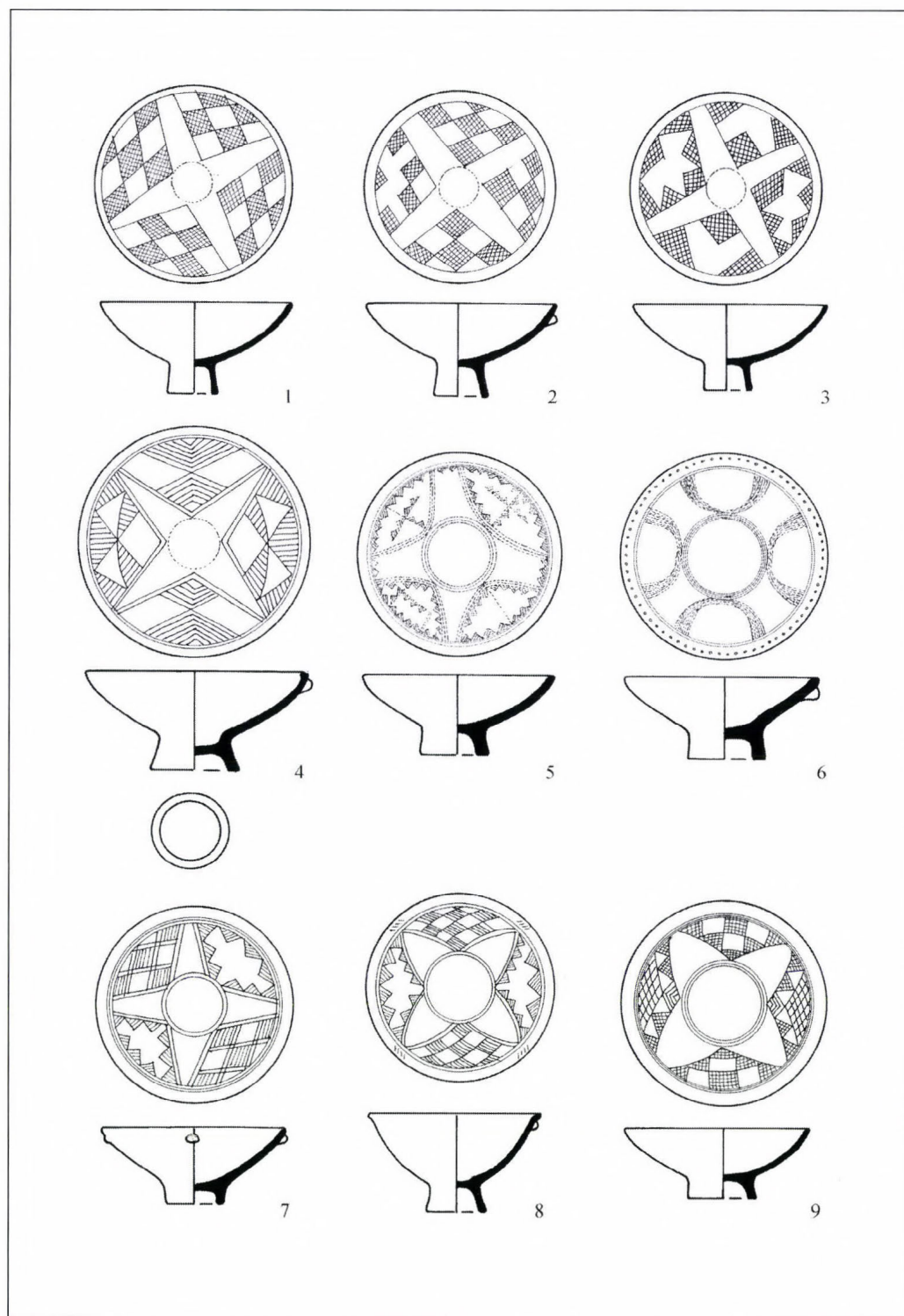
<sup>709</sup> In Hungary: Kiskunhalas–collection of the Reformed Gymnasium (147), Nemesvámos–Kasza-dűlő (193), Táp–Borbapuszta, Pit M (265). It occurs more frequently in Slovakia, together with variants of the traditional star pattern, as at Bajč–Vinohrady (307), Čaka–Kopeck, Grave 8 (316), Malé Kosihy–Papföld (343), Nitriansky Hrádok–Zámeček (360). In Austria: Sommerein–“Kurzen Ellen“ (396).

<sup>710</sup> Szeged–Kiskundorozsma–Subasa, Grave 234 (241).

<sup>711</sup> Tarnabod–Berekalja (259).

<sup>712</sup> Hódmezővásárhely–Gorza–Kovács-tanya (128), Kecskemét–Szikra (145), Kunpeszér–Sinai-hegy (162), Tata–Tófarok (261), Periam (419), Pişcolt–Nișiparie (420).





*Fig. 27. Vessel types of the Makó-Kosihy-Čaka culture*

Type IX: interior decorated bowls with round hollow foot

- 1–3. Nemesvámos–Kasza-dűlő, 4. Budapest–Aranyhegyi Road, 5. Nagydém–Felsőrépápuszta,  
6. Dunaszentpál–Bolgányi Road gravel pit, 7. Kompolt–Kistér,  
8. Tarnabod–Berekalja, 9. Szentés–Jaksor

H. 4–9 cm

#### Type IX/2

Bowls decorated in the interior and on the rim.

Few bowls decorated in their interior and on the rim are known from Hungary (*Fig. 27. 6, 8, Fig. 30. 1, 4, 8*). The interior is decorated with the classical pattern. The bowl from Szarvas–Bolza kastély (235) stands out by its elaborate design, made up of triangles filled with bands and a wolf's tooth pattern combined with triangles along the bottom (*Fig. 28. 4*). The bowls in this category are usually set on a round, hollow foot (*Fig. 27. 6, 8*),<sup>713</sup> or a low, hollow, cross shaped foot (*Fig. 28. 4*).<sup>714</sup> The form of the foot is not known in the case of a few pieces (*Fig. 30. 1, 4*).<sup>715</sup>

#### Type IX/3

Bowls decorated on the exterior, the interior and the rim.

Intact bowls with decoration on the exterior, the interior and the rim are not known from the Hungarian distribution of the Makó–Kosihy–Čaka culture. Stray finds of decorated rim fragments are known from three sites lying east of the Danube (*Fig. 30. 7*),<sup>716</sup> and it seems likely that a few fragments decorated on both sides can be assigned to this category too.<sup>717</sup> Two sites in Slovakia yielded bowl fragments of this type,<sup>718</sup> as well as a few fragments bearing hatched triangles on both sides, whose rim was perhaps also decorated.<sup>719</sup> Comparable sherds with hatched triangles are known from Austria.<sup>720</sup> The foot form of these bowl fragments is not known.

#### Type IX/4

Bowls decorated on the rim and the foot.

One single fragment of a bowl decorated on the rim and the foot has been found to date. The bowl set on a low, solid, cross shaped foot from Debrecen–Szövetkezeti szőlőtelep (79) is decorated with a zig-zag line around the rim and stroke ornamented lines on the foot (*Fig. 28. 9*). This piece has no known analogies.

A decorated base fragment from Hidegség (124) in western Hungary comes from a bowl with solid, cross shaped foot, reflecting the influence of the Vučedol culture and the Ljubljana/Laibach complex. It seems likely that the bowl set on this foot was decorated in its interior.

#### Type IX/5

Undecorated bowls.

Plain, undecorated bowls are rare. The few known pieces are stray finds from eastern Hungary: one comes from County Hajdú (120) (*Fig. 28. 10*), and two from County Szabolcs (233), but their cultural attribution is uncertain.

### The foot forms

Eight main types can be distinguished as regards the foot form of the interior decorated bowls from the Hungarian distribution of the Makó–Kosihy–Čaka culture. In the culture's north-western distribution

<sup>713</sup> Dunaszentpál–Bolgányi Road gravel pit (86), Tarnabod–Berekalja (259).

<sup>714</sup> Szarvas–Bolza kastély (235).

<sup>715</sup> Kunpeszér–Sinai-hegy (162), unprovenanced from the Szentes area (250).

<sup>716</sup> Cegléd–Réti-dűlő (64), Csanytelek–Rétoldal (Palé) (65), Hódmezővásárhely–Solt-Palé-Égető B.-tanya (129).

<sup>717</sup> Békéscsaba–Nagyrét, Gerlai sarok (30), Szarvas–Érpart, Sonkoly-tanya (236).

<sup>718</sup> Branč–Arkuš (earlier Lúky–Gergelová; 312), Patince–bank of the Danube (362).

<sup>719</sup> Chotín–Simítos (328), Nitriansky Hrádok–Zámeček (360).

<sup>720</sup> Breitenbrunn (380), Grub an der March–Unterhaspel-South (383), Wien–22–Aspern “Weber” (397).



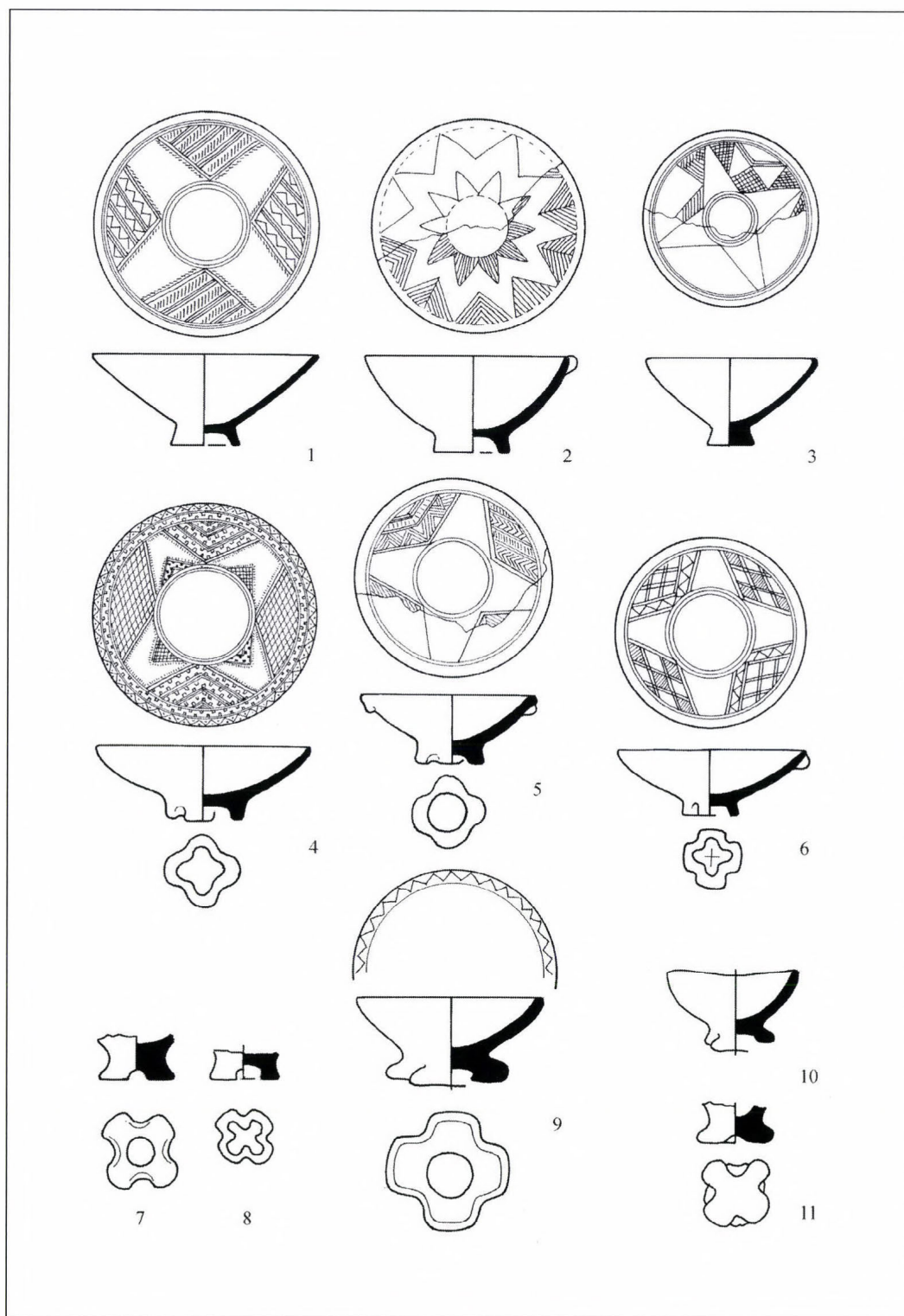


Fig. 28. Vessel types of the Makó-Kosihy-Čaka culture. Type IX: interior decorated footed bowls

1. Periam, 2. Szeged-Kiskundorozsma, Subasa, 3. Bajna-TSZ major, 4. Szarvas-Bolza kastély,  
5. Debrecen-Bellegelő 266, 6. Makó-Vöröskereszt, 7. Oszlár-Nyárfaszög, 8. Esztergom-Kovácsi,  
9. Debrecen-Szővetkezeti szőlőtelep, 10. County Hajdú, 11. Szigetmonostor-Felső rétek

H. 4-9 cm

(Slovakia and Austria) the foot is predominantly of the rectangular, hollow type, while bowls set on a round pedestal or a low, hollow, cross shaped foot occur but rarely. A bowl with a cross shaped foot and two pieces whose foot form are not known have been published from the culture's southern and eastern fringes.<sup>721</sup>

#### Type IX/A

Interior decorated bowls with round, hollow pedestals.

In sum, we may say that bowls decorated in their interior only set on round, hollow pedestals and their variants were by far the most popular in the culture's Hungarian distribution (*Fig. 27, Fig. 28. 2*).<sup>722</sup> A low and a tall conical variant of the hollow foot can also be noted. The distribution of this type is more or less even in Hungary, while only one piece is known from Slovakia<sup>723</sup> and two round pedestals have been published from Austria.<sup>724</sup>

#### Type IX/B

Interior decorated bowls with a low, round, solid foot or foot-ring (*Fig. 28. 3*).

Bowls of this type are uncommon,<sup>725</sup> and the currently known pieces of this type were all found in the culture's northern Hungarian distribution.

#### Type IX/C

Interior decorated bowls with a low, hollow, curved, cross shaped foot.

Bowls with a low, hollow, curved, cross shaped foot are relatively rare (*Fig. 28. 4–5*)<sup>726</sup> and with the exception of a piece from Tét–Szarkavár (268), they occur in the easterly and south-easterly areas of the culture's distribution.

<sup>721</sup> Čoka (426) and Periam (419), Pişcolt–Nişipărie (420).

<sup>722</sup> Cp. note 705. This foot form also occurs among the bowls decorated in their interior and on the rim: Dunaszentpál–Bolgányi Road gravel pit (86), Tarnabod–Berekalja (259). The plain, undecorated bowls too had a foot of this type, as shown by two stray finds from County Szabolcs (233). The broken bowls decorated in their interior only too were mostly set on a foot of this type: Kunfehértó–Kovács-tanya (161), Nyíregyháza–Morgó (195), Oszlár–Nyárfaszög, Pit 1077 (201). Several other sites yielded foot fragments: Domony–J. Roob's garden, Pit B2 (83), Örménykút–Szilai-halom (203), Tihany–Rév (Láp) (271), Tiszadada–Téglavető környéke (275), Tizsakürt–Homoki szőlő (277). A few unpublished hollow, round foot fragments must also be mentioned here: Biatorbágy–Szarvasugrás (41), Biatorbágy–Tyúk-berek (42), Veszprém–7 Kossuth L. Street (300).

<sup>723</sup> Vráble–Fidvar (375).

<sup>724</sup> Schwechat–Bierkeller (392), Ziersdorf (398).

<sup>725</sup> Only one bowl decorated in its interior could be restored: Bajna–TSz major (10). The bowl fragments include one base fragment which had probably been set on a round, solid foot or foot-ring: Oszlár–Nyárfaszög, Pit 1075 (201). The other fragments in this category include a piece from Boldog–Vasútállomás (44), Tizsapüspöki–Karancs (280), one bowl from Kisvárdá–34 Boldogasszony Street (149) decorated with a zoned pattern in its interior, and one from Pit 274 of the Tizsalúc–Sarkad site (278) set on a foot-ring.

<sup>726</sup> The bowls decorated in their interior only include one restorable piece from Debrecen–Bellegelő 266 (76) as do the ones decorated in their interior and on the rim: Szarvas–Bolza kastély (235). The base fragments from Battonya–Georgievics-tanya (17) and Tét–Szarkavár (268) can perhaps also be assigned here. A bowl with a cross shaped foot of uncertain type is known from Bajna–Öreglyuk (9).



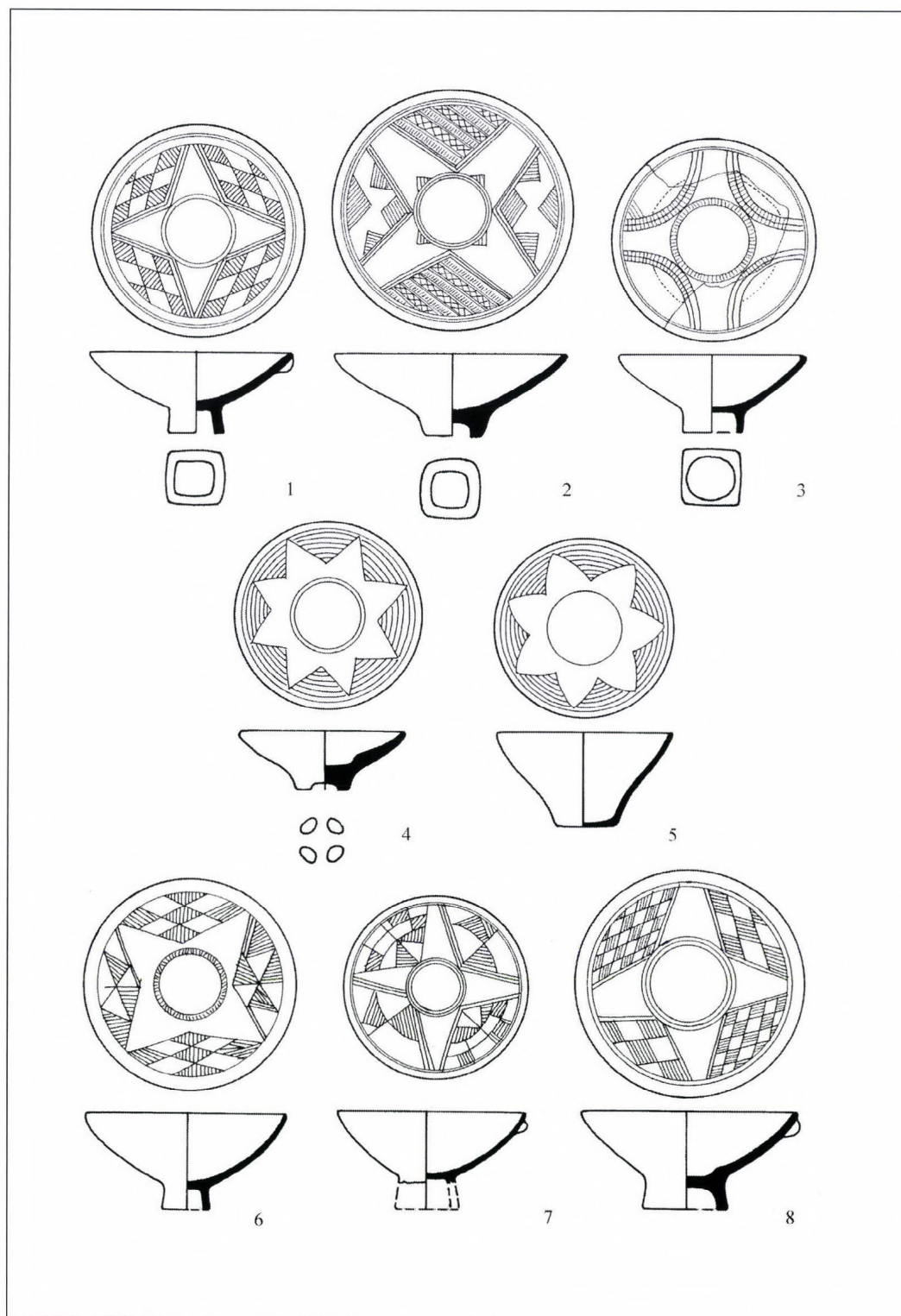


Fig. 29. Vessel types of the Makó-Kosihy-Čaka culture. Type IX: interior decorated footed bowls

1. Čaka, 2. Kiskunhalas—collection of the Reformed Gymnasium, 3. Táp-Borbapuszta,
4. Szeged-Kiskundorozsma, Subasa, Grave 234, 5. Tarnabod-Berekalja, 6. Tata-Tófarok,
7. Budapest-Aranyhegyi Road, 8. Kecskemét-Szakra

H. 4–9 cm

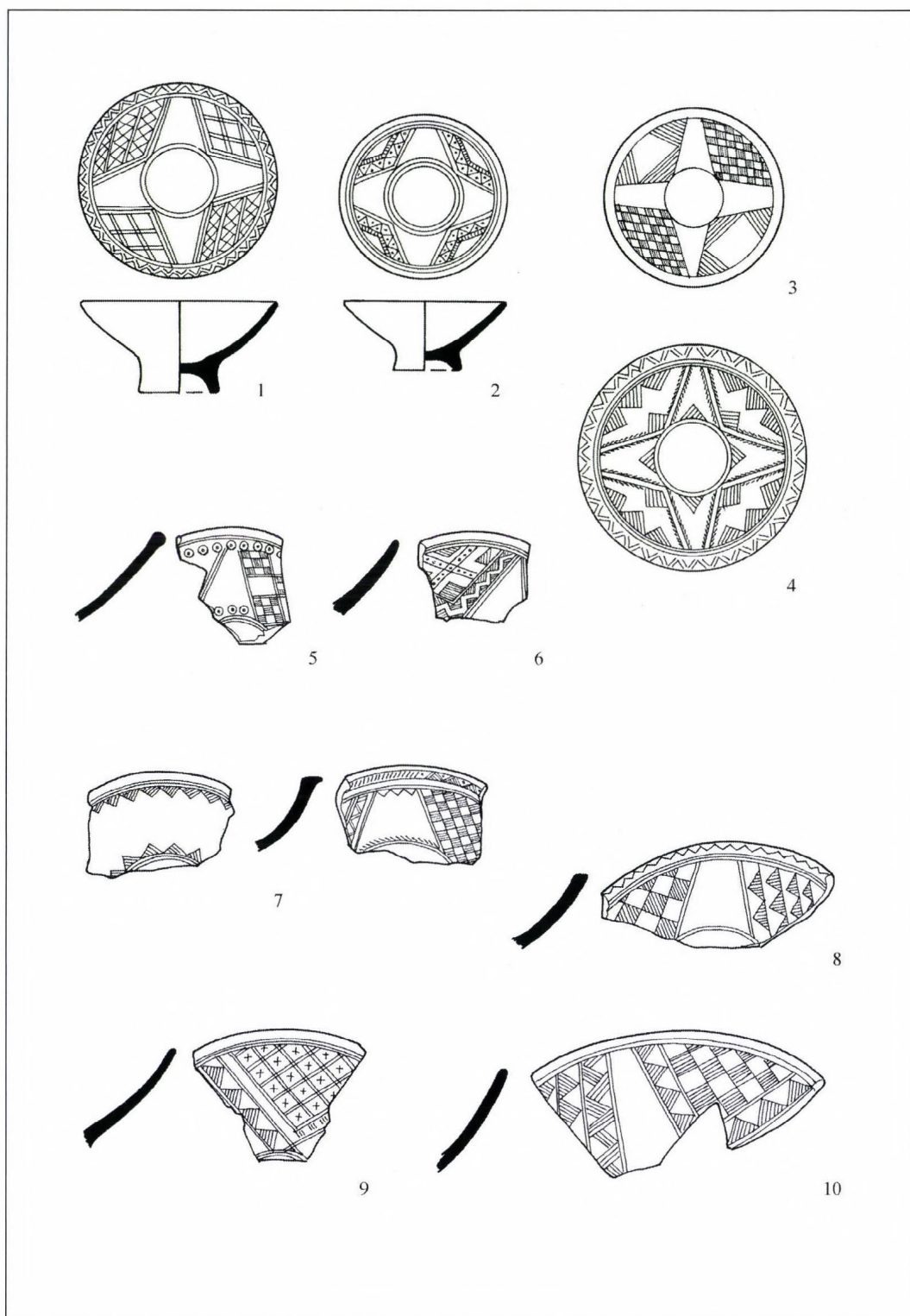


Fig. 30. Vessel types of the Makó-Kosihy-Čaka culture. Type IX: interior decorated footed bowls

1. Szentes, 2. Hódmezővásárhely-Gorzsá, Kovács-tanya, 3-4. Kunpeszér-Sinai-hegy,  
5-6. Tiszalúc-Sarkadpuszta, 7. Csanytelek-Rétoldal, 8. Tápiószéle,  
9. Mezőgyán-Gépműhely, 10. Csongrád-Saroktanya

H. 4-9 cm



#### Type IX/D

Interior decorated bowls with a low, hollow, cross shaped foot.

Pieces with a low, hollow, cross shaped foot (*Fig. 28. 6–8*) are similarly infrequent. A bowl decorated in its interior only can be quoted from the eponymous site at Makó–Vöröskereszt (171).<sup>727</sup>

#### Type IX/E

Interior decorated bowls with low, solid, cross shaped foot.

Bowls with a low, solid, cross shaped foot are relatively rare in eastern Hungary (*Fig. 28. 9, 10*), whose counterparts are known from central and western Hungary (*Fig. 28. 11*). This variant is known from Debrecen–Szövetkezeti szőlőtelep (79). A comparable, undecorated bowl with a similar foot was found in County Hajdú (120). The fragment of a solid, but slightly narrower cross shaped foot is known from Szigetmonostor–Felső-rétek (256), while another variant of bowls with a wide, cross shaped foot is represented by a fragment decorated with a linear pattern encircling the interior's bottom and a hatched triangle pattern on the foot from Hidegség (124).

#### Type IX/F

Interior decorated bowls with a hollow, rectangular foot.

Bowls with a hollow, rectangular foot (*Fig. 29. 1–3*) are known exclusively from central and western Hungary.<sup>728</sup> This variant occurs among the bowls from Slovakia and Austria too, suggesting that this type was chiefly used in the culture's westerly areas.<sup>729</sup>

#### Type IX/G

Interior decorated bowls set on four small feet.

A unique piece both as regards its decoration and its base of four small feet came to light from a grave uncovered at Szeged–Kiskundorozsma–Subasa (241) (*Fig. 29. 4*).

#### Type IX/H

Interior decorated bowls without a foot.

At present, the variant without a foot is represented by one single bowl found at Tarnabod–Berekalja (259) (*Fig. 29. 5*). This bowl can be assigned to the rare types in the light of its decoration.

The form of the foot is not known in the case of eight bowls,<sup>730</sup> which occupy a prominent place in the typological evaluation (*Fig. 28. 1, Fig. 29. 6, 8, Fig. 30. 1–4*).

<sup>727</sup> The cultural attribution of the stray find from Vel'ké Kostol'any/Nagykosztolány in Slovakia is uncertain (*Novotný* [1955] Obr. 2. 4, Obr. 6. 1). The fragmentary bowls include a piece from Esztergom–Kovácsi (99). One variant of the cross shaped foot has a round impression in the centre: Oszlár–Nyárfaszög, Pit 1034 (201). This foot variant is also known from the culture's southern distribution: Čoka–Kremenyák (426).

<sup>728</sup> Three bowls of this type are known among the pieces decorated in the interior only: Kiskunhalas–collection of the Reformed Gymnasium (147), Nemesvámos–Kasza-dűlő (193), and Táp–Borbapuszta, Pit M (265). One fragment comes from the settlement investigated at Budapest–Aranyhegyi Road (49) and Esztergom–Szentgyörgymező (101).

<sup>729</sup> Bajč–Vinohrady (307), Čaka–Kopec, Grave 8 and various stray finds (316), Chotín–Simítós (328), Malé Kosihy–Papföld (343), Mužla–Čenkov (346), Nitriansky Hrádok–Zámeček (360), Sládkovičovo (368), Šarovec–former brick factory (370). The single bowl with rectangular foot in Austria was found at Sommerein–"Kurzen Ellen" (396).

<sup>730</sup> The pieces from Hódmezővásárhely–Gorzsa–Kovács István-tanya (128), Kecskemét–Szikra (145), Kunpeszér–Sinai-hegy (162), Tata–Tófarok (261), Periam (419) and Pişcolt–Nişipărie (420) can be

### Decorative technique

The quality of interior decorated bowl varies, ranging from carefully made, decorated pieces to rather careless ones. There is no obvious difference between the quality of the bowls placed in graves and the ones found on settlements, although chronological differences may be assumed behind the divergences in quality in a few cases. The earlier, more carefully drawn patterns in the stab-and-drag (“Furchenstich”) style are succeeded by simple incised lines and the patterns too are more roughly drawn on the bowls from the burials dating to the culture’s late phase.<sup>731</sup>

In an earlier study I suggested that the more sophisticated, lavish ornamentation of the bowls from the south-easterly areas of the Great Hungarian Plain inspired by Vučedol designs can perhaps be taken to indicate an early phase in the Makó–Kosihy–Čaka culture.<sup>732</sup> The detailed analysis of the currently known corpus of these bowls, however, indicates that this possibility must be treated with caution and that regional differences seem more likely.

Lime-encrusted patterns in the stab-and-drag style are the most general across the culture’s distribution. These are sometimes replaced by simple incised patterns.<sup>733</sup> The ceramic inventory from settlements often includes both carefully and more roughly made bowls, as at Tiszalúc–Sarkad (278), although some sites, such as Budapest–Aranyhegyi Road (49) yielded carelessly made pieces only.

Designs in the deeply incised and stab-and-drag style, a hallmark of the preceding Vučedol period and of other vessel types of the Nyírség culture, are rare in the Makó–Kosihy–Čaka distribution, occurring exclusively in the south-easterly areas of the Great Hungarian Plain. The bowl from Szarvas–Bolza kastély (Fig. 28. 4) is decorated with a deeply excised wolf’s tooth pattern, and a similar motif adorns the bowl fragments from Orosháza (199) and Hódmezővásárhely–Szakálhát (131). A pattern imitating cord impressions is known from Nyíregyháza–Morgó (195).<sup>734</sup>

The size of a few bowls is known from their publication. The smallest ones are 4–5 cm high,<sup>735</sup> several pieces are 6–6.5 cm high,<sup>736</sup> most have a height of 7–9 cm.<sup>737</sup> The rim diameters range between 16 and 22 cm.<sup>738</sup>

### Chronology of interior decorated bowls

The earliest pieces among the bowls of the Makó–Kosihy–Čaka culture are the ones with a cross shaped foot and an elaborate decoration on the exterior and interior and, occasionally, on the rim.

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assigned to the variant decorated in the interior only, while the type decorated on the rim and in the interior is known from Kunpeszér–Sinai-hegy (162) and the Szentes area (250).

<sup>731</sup> E.g. Budapest–Aranyhegyi Road (49), Tata–Tófarok (261).

<sup>732</sup> Kulcsár (1999a).

<sup>733</sup> E.g. Budapest–Aranyhegyi Road (49), Budapest–Békásmegyer, Buváti (51), Iszkaszentgyörgy (134).

<sup>734</sup> The fragment from Nagyhalász–Királyhalom is excluded from among the interior decorated bowls of the Makó–Kosihy–Čaka culture (Kalicz [1968] Taf. I. 18) and the cultural attribution of the bowl fragment from Branč (313) is also uncertain: Vladár (1964b) 79, 89, Abb. 41. 5, 7; *idem* (1966) 255, Abb. 33. 7; *idem* (1973) 92–93, Obr. 70. 1–2. Cp. Dani (2005c).

<sup>735</sup> Unprovenanced piece from County Szabolcs (233), Debrecen–Szövetkezeti szőlőtelep (79), Tiszapüspöki–Karancs (280).

<sup>736</sup> Hódmezővásárhely–Gorzsá-Kovács István-tanya (128), Kiskunhalas–collection of the Reformed Gymnasium (147), Szarvas–Bolza kastély (235), Szentes–Jaksorpart (249).

<sup>737</sup> Budapest–Aranyhegyi Road, grave (49), Debrecen–Bellegelő 266 (76), Dunaszentpál–Bolgányi Road gravel pit (86), Kompolt–Kistér, Grave 2 (153), Magyarcsanád–Bökény (169c), Makó–Vöröskereszt (171), Pusztaszer–Felsőpusztaszer A (220).

<sup>738</sup> Dunaszentpál–Bolgányi Road gravel pit (86), Makó–Vöröskereszt (171), Pusztaszer–Felsőpusztaszer A (220), Szarvas–Bolza kastély (235), Szentes–Jaksorpart (249), and a stray find from the Szentes area (250).



These bowls show close links with the Vučedol/late Vučedol complex. Bowls generally regarded as early pieces occur more often in some regions, e.g. in the south-eastern areas of the Great Hungarian Plain, in the Debrecen area and in the Little Hungarian Plain/Alpine foreland area, perhaps reflecting the northward spread of the Vučedol style.

With the exception of a single specimen from Tét (268), bowls with a low, hollow, curved, cross shaped foot are most widespread in the culture's eastern and south-eastern distribution. The bowl from Szarvas–Bolza kastély (235), assigned to the group of early bowls, stands out by its elaborate, deeply excised wolf's tooth pattern (*Fig. 28. 4*). Bowls with a low, hollow, cross shaped foot occur sporadically in the central and eastern/south-eastern areas. The bowls set on a wide cross shaped foot, which lack good analogies in the Vučedol culture, are similarly known solely from eastern Hungary (*Fig. 28. 9–10*; Debrecen–Szövetkezeti szőlőtelep [79], unprovenanced from County Hajdú [120]).<sup>739</sup>

Bowls with a wide cross shaped foot decorated in the late Vučedol style occur sporadically in the culture's western distribution. One such piece was found at Hidegség (124). The cultural analogies of this bowl can be traced to the late Vučedol complex in the Ljubljana area through the eastern Alpine foreland. Stray finds of bowls from eastern Austria, whose cultural attribution is uncertain, can be fitted into this early cultural network too.

While differing from the similar vessels of the Vučedol culture on several counts, one variant of Makó–Kosihy–Čaka bowls was clearly inspired by Vučedol traditions. These bowls can be regarded as part of the Makó–Kosihy–Čaka culture's basic vessel types. They are usually decorated in their interior only (although a few pieces have a decorated rim), the design is arranged in a star pattern, with the triangles of the star motif filled with a combination of hatching, a lattice and/or a zoned pattern. The design is created from motifs in the stab-and-drag style or incised lines encrusted with lime. The bowls in the culture's western (chiefly Slovakian) distribution have a rectangular, hollow base, while the ones in the central and easterly areas a round, hollow base.

In addition to the shared features, regional styles and other variants can also be distinguished: for example, the curved triangle motif has only been observed on bowls from western Hungary (Dunaszentpál [86] and Nagydém [186]).

Some bowls exhibit traits reflecting the transition between different variants. One case in point is the bowl from Makó–Vöröskereszt (171) (*Fig. 28. 6*), whose interior is decorated in the Makó–Kosihy–Čaka style, while its foot resembles the early cross shaped pieces. This vessel can be assigned to the non-typical, but nonetheless characteristic variants of Makó–Kosihy–Čaka bowls. Other bowls in this category can be quoted from Debrecen–Bellegelő 266 (76) (*Fig. 28. 5*) and Čoka–Kremenyák (426).

Any typological analysis of Makó–Kosihy–Čaka bowls is encumbered by the fact that although several intact bowls have been found in the Great Hungarian Plain, these have not been published in detail (e.g. the form of the foot is not described in the publication of the bowls from Kunpeszér) and thus some of the observations made here may have to be revised once the finds are published in full.

The bowls with a typical, but roughly drawn design can probably be assigned to the culture's late phase. While the carelessness of the design would not in itself suggest a substantial chronological distance from the original ornamental repertoire and vessel forms, the find contexts of a few bowls in

<sup>739</sup> One good parallel to the bowls, as well as to the bowl fragment with cord impressions from Nagyhalász–Királyhalom can be quoted from Corlăteni in the Carpathian foreland, where a bowl with corded decoration set on a divided foot was recovered from the tumulus burial: *Roman–Dodd–Oprițescu–János* (1992) Taf. 59. 12a–d.



this group suggest a late date, e.g. for the pieces from Budapest–Aranyhegyi Road (49) (*Fig. 29. 7*), Budapest–Békásmegyer (Buváti) (51), and Iszkaszentgyörgy (134).

The closed, securely datable assemblages include the burial of the Budapest–Aranyhegyi Road site and Pit II/5 of the nearby settlement, from which handled jugs and cups of the Somogyvár–Vinkovci culture were brought to light.<sup>740</sup> Good analogies to the small cup with the handle springing from the rim deposited in the burial can be quoted from the grave uncovered in 1871 at Rajka–Modrovich puszta in the Little Hungarian Plain.<sup>741</sup> The cremation burial uncovered at Tata–Tófarok can probably also be assigned to the culture's late phase in view of the bowl with carelessly drawn decoration found together with one-handled cups,<sup>742</sup> which do not represent any of the Makó–Kosihy–Čaka culture's basic forms and are not particularly well represented in the culture's ceramic inventory. These north-eastern Transdanubian assemblages most likely reflect contact with the Somogyvár–Vinkovci culture during the late Makó–Kosihy–Čaka phase. The use of interior decorated bowls thus spans the entire Makó–Kosihy–Čaka sequence, including the culture's late phase, characterised by strong cultural ties with the Somogyvár–Vinkovci culture.

Grave finds reflecting contact with the Somogyvár–Vinkovci culture are also known from the regions east of the Danube. One of the cremation burials of the Makó–Kosihy–Čaka culture unearthed at Kompolt–Kistér contained an interior decorated footed bowl and a Somogyvár–Vinkovci/early Nagyrév type small cup,<sup>743</sup> while a cremation burial uncovered at Kunpeszér–Sinai-hegy (162) yielded two interior decorated footed bowls and a two-handled cylindrical flask of the Somogyvár–Vinkovci culture.<sup>744</sup>

Owing to the low number of finds from secure contexts, it is unclear whether a two-phase Makó–Kosihy–Čaka sequence can be assumed in northern Transdanubia. East of the Danube, however, certain find types, such as interior decorated bowls, allow the separation of an early period characterised by strong Vučedol impacts, especially in the eastern and southern areas of the Great Hungarian Plain,<sup>745</sup> followed by a late period marked by the appearance of vessels with asymmetrical handles<sup>746</sup> and a few settlement finds.<sup>747</sup> The grave assemblage with Somogyvár–Vinkovci/early Nagyrév type cups from Kompolt and the settlement finds dated by Nyírség cups (Oszlár–Nyárfaszög [201]) from the northern part of the Great Hungarian Plain suggest that a late Makó–Kosihy–Čaka phase cannot

<sup>740</sup> *Kalicz-Schreiber* (1994) Abb. 2. 3, Abb. 3. 3–8, Abb. 9. 1.

<sup>741</sup> *Ibidem* Abb. 2. 3. Cp. Rajka: *Figler* (1994) 22, Abb. 9.

<sup>742</sup> Several cups of this type are known from north-eastern Transdanubia (e.g. Esztergom–Szentkirály I. [100]: MRT 5, Pl. 9. 1), which have been assigned to the Somogyvár–Vinkovci culture (*Bóna* [1965a] 41, Pl. XII. 8; *Bondár* [1995] 230, 251, Fig. 19) or are interpreted as stray finds contemporaneous with the late Somogyvár–Vinkovci culture: *Ecsedy* (1979a) Abb. 6.

<sup>743</sup> *Gogáltan* (1999a). A similar cup was recovered from a pit of the Makó–Kosihy–Čaka culture together with the fragments of an interior decorated bowl and bowls decorated with crescentic ribs at Ziersdorf in Lower Austria: *Hasenhündl* (1997) 771, Abb. 393–399. The latter have been assigned to the “Makó–Kosihy–Čaka group of the Jevišovice culture”, with the cup indicating contact with the Somogyvár–Vinkovci group.

<sup>744</sup> It must here be noted that the interior decorated bowls from the Kunpeszér burial are very carefully made pieces. Unfortunately, the flask has not been published yet and it is therefore not known which Somogyvár–Vinkovci flask type it represents.

<sup>745</sup> Bowls with a cross shaped foot are known from Debrecen–Bellegelő 266 (76), Makó–Vöröskereszt (171), Szarvas–Bolza kastély (235), Szentes–Jaksor (249); bowls decorated on the exterior and interior have been found at Csanytelek–Palé (65), in the Hódmezővásárhely area (129) and at Mezőgyán–Gépműhely (175).

<sup>746</sup> Hódmezővásárhely–Gorzsa (127), between Kunszentmárton and Szentes (163), between Szentes and Orosháza (251). Cp. *Kalicz-Schreiber* (1991); *Kulcsár* (2002a).

<sup>747</sup> Battonya–Aradi Road I (15), Tiszakürt–Homoki szőlő (277).



be excluded in northern Transdanubia either (Budapest–Aranyhegyi Road [49], the Esztergom area [97], Iszkaszentgyörgy [134], Tata–Tófarok [261]).

The latest use of interior decorated footed bowls can be noted in the regions formerly occupied by the Makó–Kosihy–Čaka culture. Two examples can be quoted in this respect. Two stray bowls are known from Tököl, from an area used for burial by the Bell Beaker culture. The two vessels were found in 1876, when floodwaters breached the embankment of Danube: one is decorated in its interior, the other is plain.<sup>748</sup> The fragment of a similar bowl set on a rectangular, fenestrated foot with decoration on its exterior, interior, rim and foot came to light from one of the Tököl graves.<sup>749</sup> The design in the bowl's interior echoes the Makó–Kosihy–Čaka type chequerboard pattern, but the bowl is more elaborately decorated than the average Makó–Kosihy–Čaka vessel of this type.

Evidence for the late use of these bowls has been published from Moravia too, where coarsely made variants of interior decorated bowls have been found in burials of the Moravian Corded Ware culture.<sup>750</sup>

The current corpus of Makó–Kosihy–Čaka bowls allows merely the identification of a few typical traits and tendencies. Arguments for the early and late use of Makó–Kosihy–Čaka bowls are tentative and can only be confirmed by assemblages from secure contexts.

### *X–XIII. Pots and storage jars (Figs 31–34)*

The exact form of the storage jars and pots found on the settlements of the Makó–Kosihy–Čaka culture cannot be reconstructed with accuracy because hardly any intact vessels of this type have been found. Pots and storage jars can be regarded as the most frequent wares next to bowls. Three main types can be distinguished:

- (a) Handled pots, also coming in two main varieties: one-handled pots (Types X/1–5: *Fig. 31*) and two-handled pots (Types XI/1–6: *Fig. 32*). These vessels include larger, coarser handled pots and smaller vessels resembling mugs. Their height ranges between 11 cm and 30 cm.
- (b) A second category, that of small pots (Types XII/1–4: *Fig. 32*), was based on the size (H. 14–22 cm) and the finer surface treatment of these vessels.
- (c) Handleless pots (Types XIII/1–8: *Figs 33–34*), of which there are two main varieties: a wide-mouthed, taller variant with rounded shoulder (Type XIII/1) and narrow-mouthed, more globular vessel (Types XIII/2–3). The rim and neck form of these vessels served as the starting point for their typologisation, seeing that intact vessels are rare in the known assemblages. The measurable height of these vessels ranges between 18 cm and 35 cm.

### *Surface treatment and decoration*

The neck and, occasionally, the shoulder are smoothed, while the rest of the vessel body is rusticated. However, there are a few pots whose entire surface is smoothed. The practice of smoothing and roughening different parts of the same pot was fairly widespread during the Early Bronze Age,<sup>751</sup> as

<sup>748</sup> *Schreiber* (1972) *Fig. 9. 1a–b, 3a–c*; *Kalicz-Schreiber* (1984b) *Taf. XXXIV. 5–6*.

<sup>749</sup> The grave goods from Grave 55 (probably a scattered cremation burial) of the Tököl II cemetery were a cup and a foot fragment: *Schreiber* (1975) 191, *Fig. 13. 6a–c*; the cup is unpublished.

<sup>750</sup> E.g. Tovačov I, Grave 2: *Šebela* (1993) *Obr. 126. 6*; *idem* (1999b) *Pl. 110. 1*; Modřice–Feature 7: *Matějčková* (1999).

<sup>751</sup> *Csányi* (1996) 54 (“the perennial pot”).

shown by the similarly treated vessels of the Makó–Kosihy–Čaka, the Somogyvár–Vinkovci and the Nyírség cultures, as well as of the Bell Beaker–Csepel group and the early Nagyrév period.

#### Brushed surface

The most common procedure for roughening vessel surfaces was coarse brushing.<sup>752</sup> Makó–Kosihy–Čaka vessels were often coarsely brushed and then smoothed before firing, resulting in a lumpy surface.<sup>753</sup> Various types of brushing and scoring can be traced from the onset of the Early Bronze Age to the close of the period and beginning of the Middle Bronze Age, for example on the vessels of the early and classical Hatvan and Nagyrév period.<sup>754</sup>

A finer, more regular, comb-like variant of brushing was also applied, especially in the eastern Makó–Kosihy–Čaka distribution.<sup>755</sup> The finer treatment of these vessels differs visibly from the coarsely brushed pots. The same finer treatment can be noted on the slightly later pots of the early Nagyrév/Bell Beaker period.<sup>756</sup> Finely brushed pots with curved neck have also been found among the pottery of the Hatvan culture.<sup>757</sup> A few vessels were treated with loose brushing.<sup>758</sup>

#### Smeared barbotine decoration

Similarly to brushing, this surface treatment is also a decorative technique typical for this period. The coarsely smoothed vessel was splashed with clay paste, which was then either smoothed to some extent or was left as it was, forming small blobs.<sup>759</sup>

Vessels with smeared barbotine decoration were popular in the Somogyvár–Vinkovci culture. It was far less widespread in the Nyírség culture, whose potters preferred different types of brushing. The use of smeared barbotine for decorating vessels declined by the close of the Early Bronze Age and the onset of the Middle Bronze Age, and was replaced by various types of brushing and, later still, by a combination of brushing and combing or combed bundles of lines.

#### Rim forms and their decoration

Most pots of the Makó–Kosihy–Čaka culture have simple rounded rims which are occasionally decorated with a small knob.<sup>760</sup>

Pots with slightly outturned, thickened in and out rim appear to have been popular in the culture's eastern Hungarian territories. Many pots of this type were brought to light at Tiszalúc–Sarkadpuszta.<sup>761</sup> Some have a finger-impressed cordon around the neck<sup>762</sup> or a knob on the shoulder.<sup>763</sup> Pots with a

<sup>752</sup> Tiszakürt–Homoki szőlő: Csányi (1996) 53, Pl. III. 6, Pl. IX. 3, Pl. X. 11, Pl. XI. 2.

<sup>753</sup> Tiszakürt–Homoki szőlő: *ibidem* 53, Pl. VIII. 4, Pl. X. 4; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. VI. 2, 8.

<sup>754</sup> For a recent discussion of various surface treatments such as brushing, combing, “Schlickwurf”-like splashed barbotine and “Textilmuster”, cp. Némethi–Dani (2001) 112–115.

<sup>755</sup> Domony: Kalicz (1968) Taf. VI. 29, Taf. VIII. 9; Tiszakürt–Homoki szőlő: Csányi (1996) 53, Pl. III. 5, Pl. IX. 5, 6, Pl. XI. 1; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. II, Taf. VII. 1.

<sup>756</sup> Dunaföldvár–Kálvária, layer IV: Szabó (1992) 48–49, Pl. VII. 5, 7, 9.

<sup>757</sup> Tarnaszádány–Sándorrésze: Kalicz (1968) Taf. 87. 9, 10, 12.

<sup>758</sup> Tiszakürt–Homoki szőlő: Csányi (1996) 53, Pl. X. 3, 5–10.

<sup>759</sup> Tiszakürt–Homoki szőlő: *ibidem* 53, Pl. II. 2, Pl. VIII. 5, 9, Pl. XI. 5, Pl. XII. 9; Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. III. 3, Taf. IV. 3, Taf. XII. 7.

<sup>760</sup> Kompolt: Gogáltan (1999a) Pl. 16. 8, 10.

<sup>761</sup> Szathmári (1999b) Taf. I. 1, Taf. II. 1, 3, Taf. IV. 7, Taf. VII. 8, Taf. VIII. 5, 7.

<sup>762</sup> Tiszalúc–Sarkadpuszta: Szathmári (1999b) Taf. VII. 8.

<sup>763</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. VIII. 7.



similar rim form are known from Tiszakürt–Homoki szőlő,<sup>764</sup> Kál–Legelő, Szeghalom–Környe<sup>765</sup> and Oszlár–Nyárfaszög<sup>766</sup> too.

The pots from central and western Hungary have a strongly outturned, thickened rim accentuated with grooving,<sup>767</sup> a decoration appearing also in the ceramic assemblages from settlements in south-western Slovakia,<sup>768</sup> Lower Austria and Moravia.<sup>769</sup> Rims of this type have also been found at Kánya in southern Transdanubia.<sup>770</sup> Pots of this type are rare in the eastern Makó–Kosihy–Čaka distribution and instead of grooving, the rim is decorated with impressions.<sup>771</sup> The pottery from Tiszalúc–Sarkadpuszta and Oszlár–Nyárfaszög does not comprise pots of this type, and neither has this ware been found on the sites in the southerly areas of the Great Hungarian Plain. Thickened and grooved rims can be frequently encountered in pottery of the Mödling–Zöbing group of the slightly earlier Jevišovice culture<sup>772</sup> and, later, among the Corded Ware vessels from the Lower Traisen Valley and southern Moravia.<sup>773</sup> This shared cultural tradition, reflected in certain pottery making practices, perhaps explains why rims of this type were more popular in the western Makó–Kosihy–Čaka distribution than in central or eastern Hungary.

Several variants can be distinguished among pots with outturned rim: a slightly outturned variant, an outturned, thickened variant and an outturned, folded out rim variant.<sup>774</sup> A flat knob is sometimes set below the rim.<sup>775</sup> Some vessels have a flat/pointed knob, occasionally decorated with grooving,<sup>776</sup> perched on the rim.<sup>777</sup> The outturned rim is sometimes decorated with grooving and the occasional flat/pointed knob.<sup>778</sup> Pots with incurving neck often have a flat knob drawn out from the rim.<sup>779</sup>

The neck of the pots is usually undecorated. Very rarely, the neck is perforated by a pair of holes<sup>780</sup> or decorated with a vertical finger-impressed rib.<sup>781</sup>

<sup>764</sup> Csányi (1996) Pl. IV. 4–5.

<sup>765</sup> G. Szénászký (1987–88) Fig. 9. 6–7.

<sup>766</sup> Koós (1998) Abb. 8. 1, Abb. 12. 6.

<sup>767</sup> Károlyi (1971–72) 10, Fig. 11b; Figler (1994) Abb. 6. 6–7, 11–12.

<sup>768</sup> Vladár (1966) Abb. 18. 3, 7.

<sup>769</sup> Sommerein: Ruttkay (1982) Abb. 30–37; and Medunová-Benešová (1981a) Abb. 3. 1.

<sup>770</sup> Csalog (1941) Pl. V. 3, 18.

<sup>771</sup> Tiszakürt–Homoki szőlő: Csányi (1996) Pl. V. 1; County Békés: G. Szénászký (1987–88) Fig. 4. 8.

<sup>772</sup> Ruttkay (1995b) Abb. 30. 9.

<sup>773</sup> Neugebauer-Maresch (1994) Abb. 7. 8, Abb. 11. 3, 5.

<sup>774</sup> Budapest–Aranyhegyi Road: Kalicz-Schreiber (1994) Abb. 5. 2, and Abb. 5. 6, 7, 17, 18, Abb. 6. 8, 9, and Abb. 5. 1, 8.

<sup>775</sup> Budapest–Aranyhegyi Road: *ibidem* Abb. 5. 16, Abb. 9. 13; Domony: Kalicz (1968) Taf. VII. 9.

<sup>776</sup> Budapest–Aranyhegyi Road: Kalicz-Schreiber (1994) Abb. 10. 7.

<sup>777</sup> Budapest–Aranyhegyi Road: Schreiber (1972) Fig. 1. 12; Kalicz-Schreiber (1994) Abb. 4. 11, Abb. 5. 1, 11, Abb. 6. 1, 3, Abb. 9. 12; Bag–Peres-dűlő: Kalicz (1968) Taf. IX. 5; Székesfehérvár–Zámolyi Road: Bándi (1982) Abb. 5. 11, 13.

<sup>778</sup> Budapest–Aranyhegyi Road: Kalicz-Schreiber (1994) Abb. 4. 10, Abb. 8. 7; Domony: Kalicz (1968) Taf. IV. 20, 25, Taf. VIII. 13; Bag–Peres-dűlő: *ibidem* Taf. IX. 7; Perőcsény–Jancsi-hegy: MRT 9, Site 23/19, Pl. 13. 11.

<sup>779</sup> Battonya–Georgievics-tanya: Bondár–D. Matuz–Szabó (1998) Fig. 17. 5.

<sup>780</sup> Kompolt–Kistér, Feature 7: Gogáltan (1999a) Pl. 16. 17. Cp. Alsónémedi, Grave 11, early Nagyrév culture: Kalicz (1957) Pl. XXIV. 7.

<sup>781</sup> Veresegyház: MRT 9, Site 37/2, Pl. 13. 17.

Flat knobs,<sup>782</sup> impressed knobs,<sup>783</sup> small pointed knobs<sup>784</sup> or flat disc shaped knobs with a punctate in the centre sometimes adorn the neck line or the shoulder. The latter also appears on the shoulder of small handled pots.<sup>785</sup>

Applied decoration takes the form of cordons encircling the neck, separating the smoothed neck from the rusticated lower part,<sup>786</sup> smaller horizontal ribs,<sup>787</sup> or vertical ribs set on the shoulder.<sup>788</sup> Storage jars usually have a double rib on the shoulder.<sup>789</sup> Short, slender, horizontal ribs were also placed on the shoulder of pots.<sup>790</sup>

#### *X. One-handled pots (Fig. 31)*

One-handled pots with curved neck and shoulder and rounded body were more common in the eastern Makó–Kosihy–Čaka distribution (Types X/1–2).

##### Type X/1

One-handled variant of the small globular pot with low neck (H. 17 cm).<sup>791</sup>

##### Type X/2

Globular one-handled pot with low, curved neck (H. 21–22 cm).<sup>792</sup>

##### Type X/2a

An ovoid variant of Type X/2. The handle springs from below the rim.<sup>793</sup>

##### Types X/3–4

One-handled pots with low neck and rounded shoulder, of which two main variants can be distinguished. The larger type decorated with applied ornamentation (Types X/3a–3c) was more popular in the culture's eastern and south-eastern distribution. A two-handled variant of the same vessel form is also known (Type XI/1). The mug-like variant with low neck (Type X/4) is more frequent in the western distribution. Both variants represent typical Makó–Kosihy–Čaka wares.

<sup>782</sup> Boldog: *Kalicz* (1998a) Fig. 14. 9; Kompolt: *Gogáltan* (1999a) Pl. 16. 13. Cp. also Szentendre–Belterület: MRT 7, Site 28/3, Pl. 8. 14; Malé Kosihy: *Točik* (1981b) Taf. IX. 16.

<sup>783</sup> Boldog: *Kalicz* (1998a) Fig. 15. 7.

<sup>784</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. V. 2.

<sup>785</sup> Tiszakürt–Homoki szőlő: *ibidem* Pl. III. 1.

<sup>786</sup> Tiszakürt–Homoki szőlő: *ibidem* Pl. VII. 4, 10, Pl. IX. 2, Pl. XIII. 1–3; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. VII. 8, Taf. IX. 1, Taf. XI. 5, Taf. XIII. 3.

<sup>787</sup> Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. VII. 13, Pl. VIII. 6; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. II. 1, Taf. V. 1, Taf. XI. 7.

<sup>788</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. II. 3.

<sup>789</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. I. 2.

<sup>790</sup> Tiszalúc–Sarkadpuszta: *ibidem* Taf. V. 3, Taf. VII. 10, Taf. X. 9.

<sup>791</sup> Oszlár–Nyárfaszög, Grave 2: *Koós* (1998) Abb. 3. 2. One of the Pişcolt burials probably contained a similar handled pot: Grave 90: *Németi* (1979) Fig. 3. 6.

<sup>792</sup> Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. VIII. 1; Oszlár–Nyárfaszög: *Koós* (1998) Abb. 10. 3; Kál–Legelő III, Grave 14: *Kulcsár–Szabó* (2000) Fig. 3. 1.

<sup>793</sup> Pişcolt, Grave 74: *Németi* (1979) Fig. 2. 1.



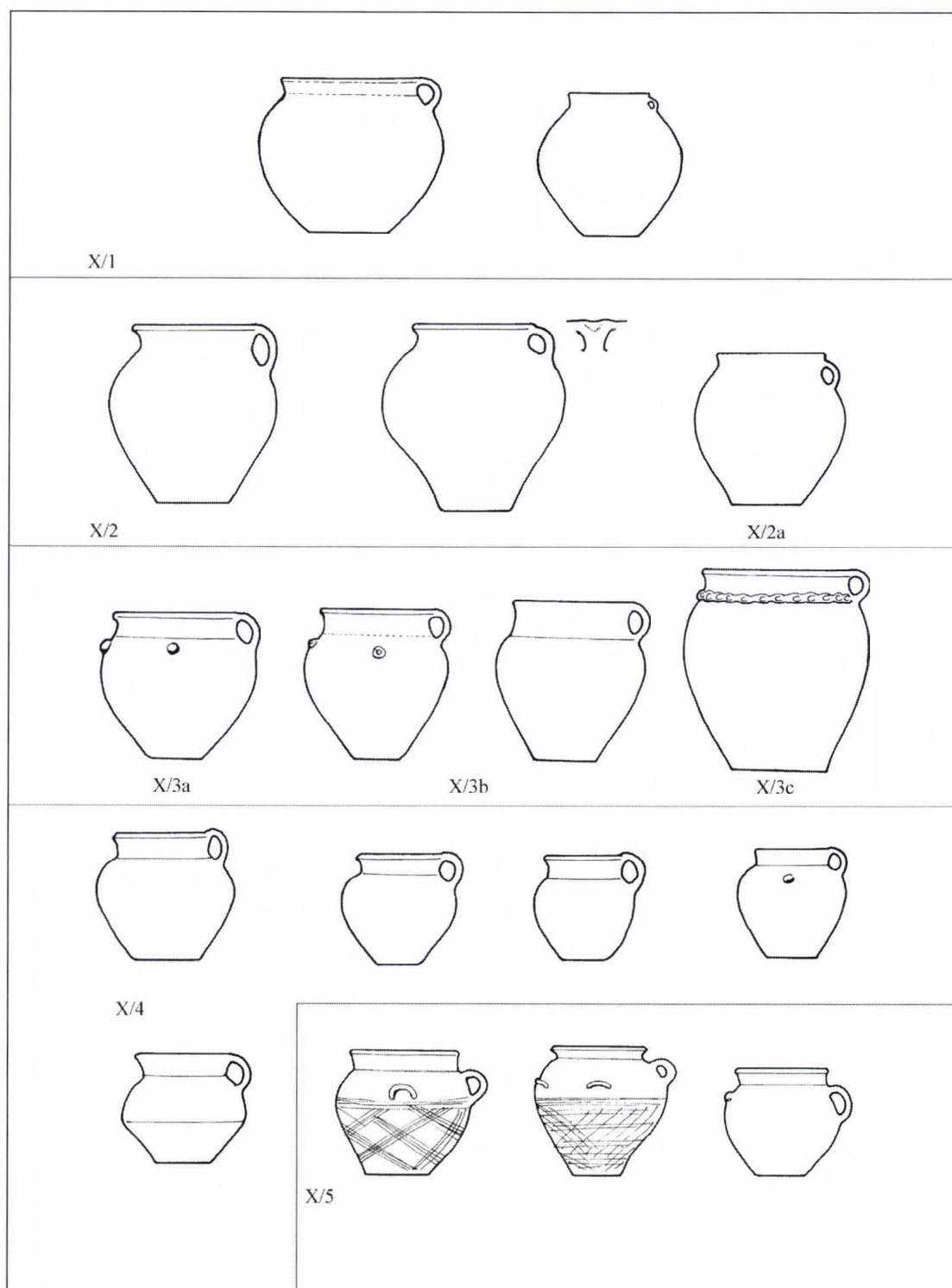


Fig. 31. Vessel types of the Makó–Kosihy–Čaka culture. Type X: one-handled pots

Type X/1: Oszlár–Nyárfaszög, Pişcolt–Nişipărie, X/2: Oszlár–Nyárfaszög, Kál–Legelő, X/2a: Pişcolt–Nişipărie, X/3a: Tiszakürt–Homoki szőlő, X/3b: Makó–Vöröskereszt, Hódmezővásárhely–Barci-rét, X/3c: Makó–Vöröskereszt, X/4: Kamenica nad Hronom, Táp–Borbapuszta, Čaka, Budapest–Budaörs Airfield, Veresegyház, Schwechat, X/5: County Veszprém, Budapest–Budaörs Airfield, Tata–Tófarok

H. 8–23.5 cm

#### Type X/3a

One-handed pot with low, incurving neck and rounded shoulder (H. 20–23 cm). The handle spans the rim and the shoulder.<sup>794</sup> Pots of this type are generally smoothed. A combed pattern can be made out on the published photo of the specimen from the Kánya settlement.<sup>795</sup> Small round knobs, occasionally of the impressed variety, are sometimes set on the shoulder, as on the pot from Tiszakürt–Homoki szőlő. The handle is often a wide strap handle with thickened base where it joins the shoulder, as on the piece from Endrőd–Site 161.<sup>796</sup> Three small knobs were placed below the handle on either side on the pot from the Mezőgyán settlement.<sup>797</sup> A similar knob-decorated pot can be quoted from Battonya–Georgievics-tanya and from sites in the Budapest area.<sup>798</sup> A small pot with a pair of tiny knobs flanking the handle from Pančevo/Pancsova–Donja varoš too bears the typical traits of Makó–Kosihy–Čaka pottery.<sup>799</sup>

In addition to the decorated pieces, plain variants of this type are also known. A smaller type (H. 13 cm) with undecorated shoulder has been recovered from sites in the southern part of the Great Hungarian Plain and in the Budapest area.<sup>800</sup>

#### Type X/3b

One-handed pot with taller incurving neck and rounded shoulder (H. 18–20 cm). The shoulder is decorated with small knobs. The shoulder line is prominent, the vessel surface is smoothed.<sup>801</sup>

#### Type X/3c

One-handed pot with low, incurving neck and rounded shoulder (H. 23.5 cm). A finger-impressed cordon encircles the neck. The vessel surface is smoothed.<sup>802</sup>

#### Type X/4

One-handed pot with low, incurving neck. The handle spans the rim and the shoulder. These pots are carefully made with smoothed, occasionally polished surface, resembling mugs rather than pots. The variants can be distinguished on the basis of the neck's length and the elongatedness/squatness of the body.

<sup>794</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 13. 11; Budapest–Budaörs Airfield: *Kalicz* (1984a) Taf. XXIII. 9, 10; Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1991) Abb. 4. 4–5; Endrőd–Site 161: *Bondár* (1999) Fig. 8. 2, Fig. 10. 2; Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. VIII. 3; Kánya: *Csalog* (1941) Pl. V. 30; Mezőgyán–Gépműhely: *G. Szénászký* (1987–88) Fig. 10. 3; Tiszakürt–Homoki szőlő: *Csányi* (1996) Pl. III. 1.

<sup>795</sup> Kánya: *Csalog* (1941) Pl. V. 30.

<sup>796</sup> *Bondár* (1999) Fig. 8. 2.

<sup>797</sup> *G. Szénászký* (1987–88) Fig. 10. 3.

<sup>798</sup> *Bondár–D. Matuz–Szabó* (1998) Fig. 13. 11; Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1991) Abb. 4. 4–5.

<sup>799</sup> *Grčki–Stanimirov* (1996) T. III. 4.

<sup>800</sup> Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. VIII. 3; Budapest–Budaörs Airfield: *Kalicz* (1984a) Taf. XXIII. 9, 10.

<sup>801</sup> Makó–Vöröskereszt: *Kalicz* (1968) Taf. II. 1; Hódmezővásárhely–Barci-rét: *Kulcsár* (1997) Pl. VIII. 3.

<sup>802</sup> Makó–Vöröskereszt: *Kalicz* (1968) Taf. II. 4.



A variant with rounded shoulder and body comes in both larger<sup>803</sup> and smaller sizes.<sup>804</sup> Another variant has a more angular shoulder, a longish body and a cylindrical neck.<sup>805</sup> Smaller pieces of this variant with the handle springing from below the rim are also known.<sup>806</sup> A rarer variant is represented by a pot with low, flaring neck, rounded conical shoulder and conical lower part.<sup>807</sup>

This small pot type was clearly typical for the western Makó–Kosihy–Čaka distribution; its use is rare in the culture's eastern territories. Vessels resembling the one-handled small pots with slightly flaring neck have been found on the Ménfőcsanak–Szeles settlement in an early (proto-)Kisapostag context.<sup>808</sup> The use of this vessel type can be demonstrated in the Bell Beaker and the Moravian Corded Ware culture too. Vladár derived comparable vessels appearing in the Bell Beaker assemblages brought to light in the Middle Danube region from the Makó–Kosihy–Čaka complex.<sup>809</sup> Ruttkay quoted the one-handled vessels of the Moravian Corded Ware culture<sup>810</sup> among the parallels to a similar vessel of the Schwechat–Brauerei burial.

#### Type X/5

One-handled small pot with low, curved neck and rounded shoulder (H. 12 cm). The handle is set on the shoulder. The type has so far only been attested in the culture's Transdanubian distribution. Several variants are known: one piece is decorated with a crescentic rib on the shoulder combined with combed bundles of lines underneath,<sup>811</sup> one has a more elongated form and is brushed on the lower half,<sup>812</sup> and a simple smoothed variant of this type with a small knob opposite the shoulder on the handle is also known.<sup>813</sup>

### XI. Two-handled pots (Fig. 32)

The classification presented here is based on the position of the handles: the handles can spring from the rim (Types XI/1–3) or be set on the neck line or the shoulder (Types XI/4–6).

#### Type XI/1

Two-handled pot with rounded shoulder (H. 13.8 cm and 18 cm), decorated with symmetrically set small knobs where the handle joins the shoulder and a rib on the shoulder.<sup>814</sup> Few restorable pieces have been found to date. This type represents the two-handled variant of the pots described under Types X/3a–3b.

<sup>803</sup> Táp–Borbapuszta, Pit M: Figler (1994) Abb. 5. 8, Abb. 6. 10; Čaka: Vladár (1966) Abb. 15. 1; Kamenica nad Hronom: *ibidem* Abb. 17. 1; Ivanka pri Dunaji: *ibidem* Abb. 27. 1; Kamenín: Nevizánsky (2001) Tab. III. 2.

<sup>804</sup> Kánya: Csalog (1941) Pl. VI. 3.

<sup>805</sup> Táp–Borbapuszta, Pit M: Figler (1994) Abb. 5. 11; Čaka: Vladár (1966) Abb. 15. 2.

<sup>806</sup> Veresegyház–Ivacsok: MRT 9, Site 37/2, Pl. 13. 16.

<sup>807</sup> Schwechat–Brauerei: Ruttkay (1995a) Abb. 2. 2.

<sup>808</sup> Figler (1996a) Pl. IV. 5. Cp. Táp–Borbapuszta: Figler (1994) Abb. 6. 10.

<sup>809</sup> Cp. Vladár (1966) 275, Abb. 31. I/3.

<sup>810</sup> Šebela (1993) Abb. 132.

<sup>811</sup> County Veszprém: Kalicz (1968) Taf. X. 6.

<sup>812</sup> Budapest–Budaörs Airfield: Schreiber (1972) Fig. 1. 11; Kalicz (1984a) Taf. XXIII. 8.

<sup>813</sup> Tata–Tófarok: Kalicz–Schreiber (1991) Abb. 13. 6.

<sup>814</sup> Jánosszállás–Katonapart: Kürti (1974) Figs 6–7; Kál–Legelő III, Grave 32: Kulcsár–Szabó (2000) Fig. 4. 3; Tiszakürt–Homoki szőlő: Csányi (1996) Pl. XII. 1.

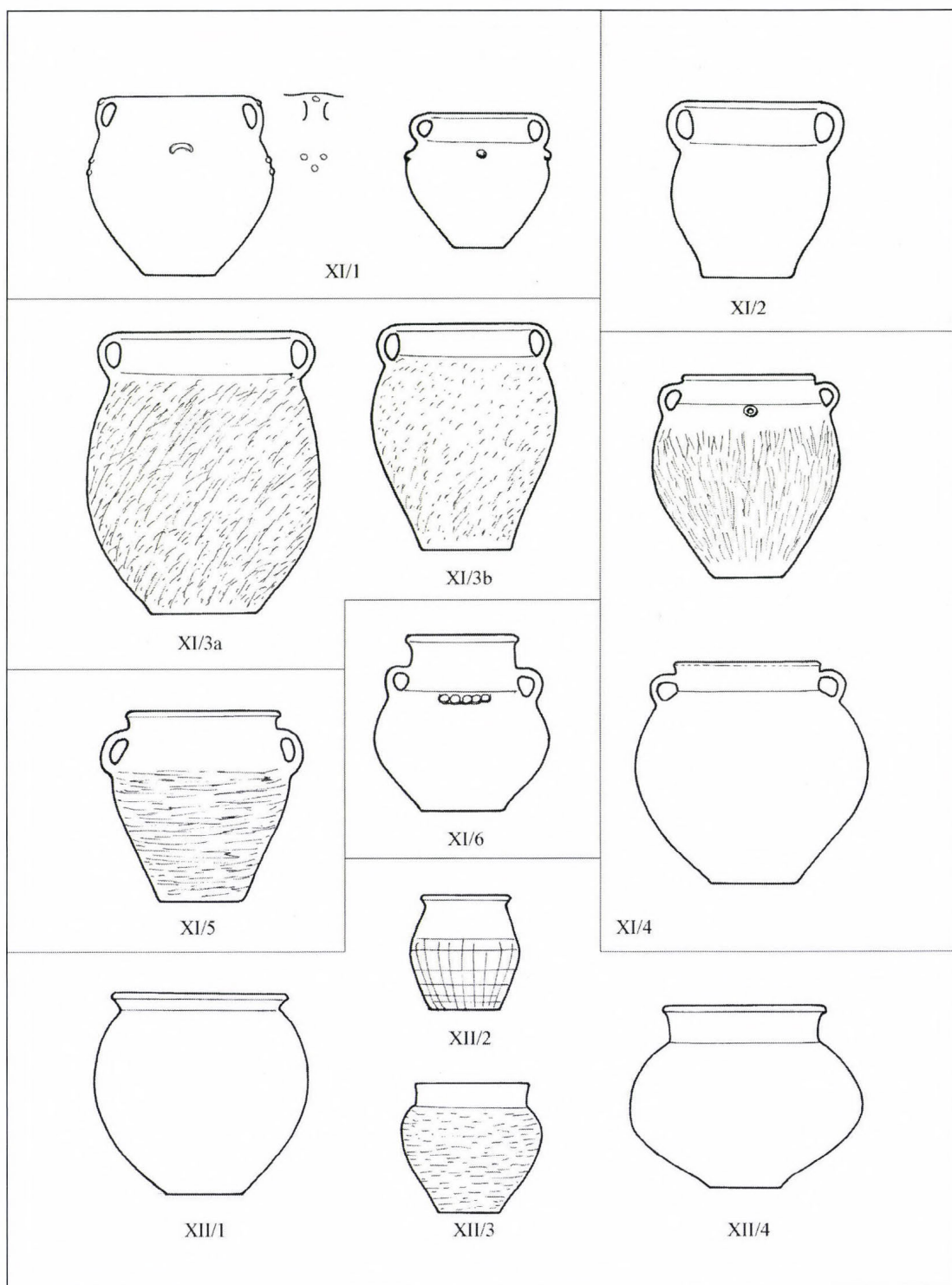


Fig. 32. Vessel types of the Makó-Kosihy-Čaka culture. Types XI–XII: two-handled pots and small pots

Type XI/1: Kál–Legelő, Jánosszállás–Katonapart, XI/2: Battonya–Vörös Október Co-operative,  
 XI/3a: Tarnabod–Berekalja, XI/3b: Battonya–Georgievics-tanya, XI/4: Domony, Táp–Borbapuszta,  
 XI/5: Čaka, XI/6: Csongrád–Sertéstelep;

Type XII/1: Oszlár–Nyárfaszög, XII/2: Abda–Hármasok, XII/3: Mezőkövesd–Mocsolyás,  
 XII/4: Oszlár–Nyárfaszög

H. 11–30 cm



#### Type XI/2

Plain two-handled pot with cylindrical neck and angular shoulder. The handles spring from the rim.<sup>815</sup> Few specimens are known from the entire Makó–Kosihy–Čaka distribution; this type appears to have been more popular in the culture's south-eastern territories. The form shares many similarities with the simple two-handled pots of the Somogyvár–Vinkovci culture (cp. SV Type XI/1).

#### Type XI/3

Two variants can be distinguished among the ovoid two-handled pots with curved neck based on the proportions of the vessel body. Both variants are only encountered in the culture's eastern distribution.

#### Type XI/3a

Two-handled, squat, ovoid pot with curved neck. The vessel body is rusticated (H. 30 cm).<sup>816</sup>

#### Type XI/3b

Two-handled elongated ovoid pot with taller, curved neck.<sup>817</sup>

#### Type XI/4

Two-handled pot with low, prominent neck. The handles are set on the neck line. The plain variant is formally close to amphoras (Type XIV/3c).<sup>818</sup> The decorated pieces have a small knob on the shoulder, underneath which the vessel body is brushed.<sup>819</sup>

#### Type XI/5

Two-handled pot resembling Type XI/2, the only difference being that the handles are set on the cylindrical neck. The vessel body is brushed below the shoulder. A rare type, found only in the culture's western distribution.<sup>820</sup>

Parallels to this vessel type can be found among the similar pots of the Somogyvár Vinkovci culture (cp. SV Type XI/2).

#### Type XI/6

Two-handled pot with cylindrical neck and flattened spherical body (H. 19.5 cm). The two handles are set on the neck line. The shoulder is decorated with a grooved rib. A rare type, the single restorable specimen comes from Csongrád–Sertéstelep.<sup>821</sup>

The best analogies can be found among the larger amphora shaped vessels (Type XIV/4). This variant has much in common with the amphora-like two-handled vessels of the Nyírség culture, one of the culture's most typical ceramic types.<sup>822</sup>

<sup>815</sup> Battonya–Vörös Október Co-operative: *Pl. I.* 7, in this volume.

<sup>816</sup> Tarnabod: *Kalicz* (1998a) Fig. 9. 1.

<sup>817</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 15. 1; Üllő–Site 5, Feature 5605: *Kővári–Patay* (2005) Fig. 37. 1.

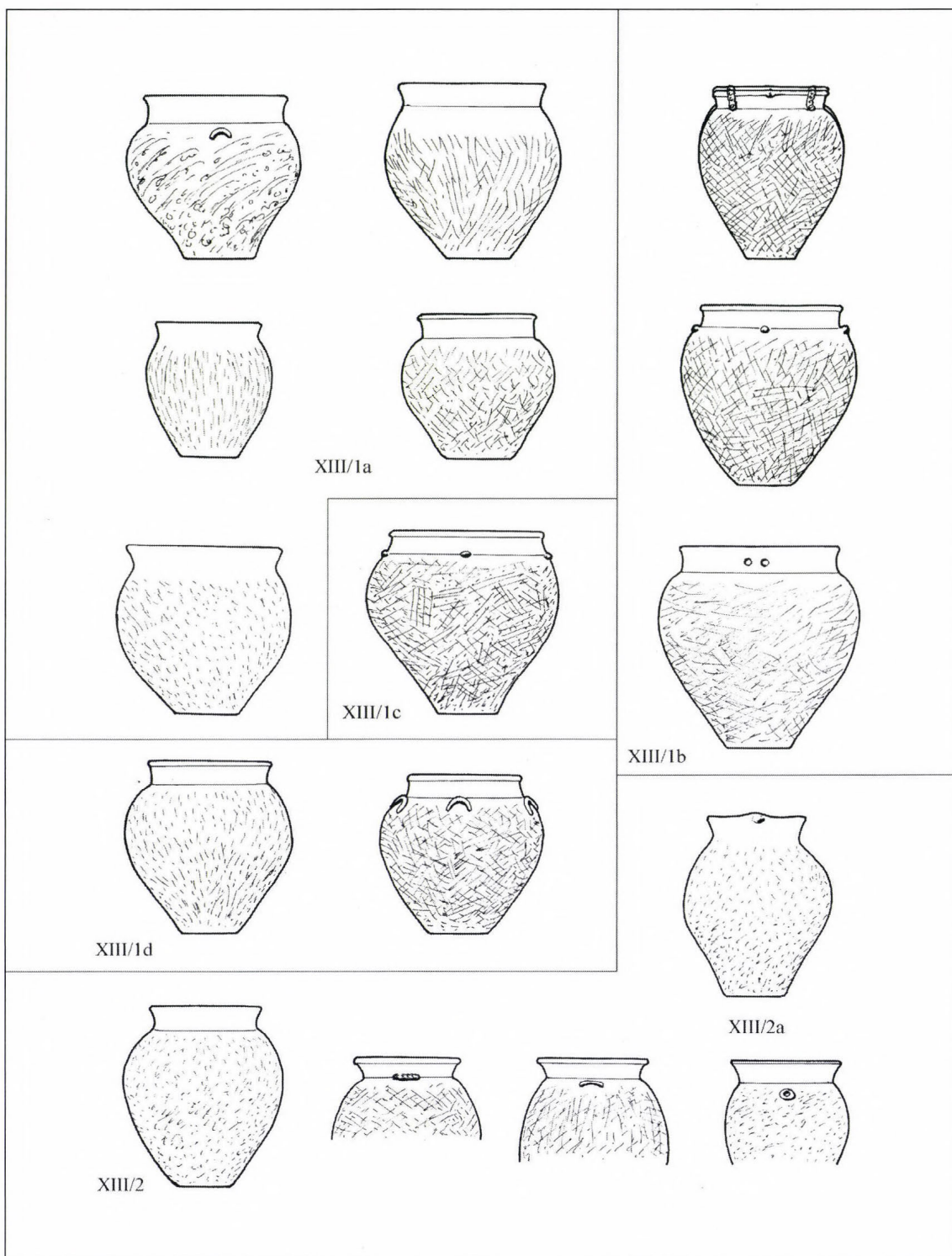
<sup>818</sup> Táp–Borbapuszta, Pit I: *Figler* (1994) Abb. 6. 9.

<sup>819</sup> Domony: *Kalicz* (1968) Taf. V. 6.

<sup>820</sup> Čaka, Feature 6/61: *Vladár* (1966) Abb. 14. 5; Mosonszentmiklós–Gyepföldek-dűlő: *Aszt* (2001) Pl. II. 308.

<sup>821</sup> *Tóth* (2001b) Fig. 12. 1.

<sup>822</sup> *Dani* (1999) 61, Pl. 19. 1, Pl. 25. 1, Pl. 26. 1, Pl. 35. 1.



*Fig. 33. Vessel types of the Makó-Kosihy-Čaka culture. Types XIII/1–2: pots*

Type XIII/1a: Szeged–Kiskundorozsma, Nagyszék I, Kál–Legelő, Battonya–Aradi Road, Tiszaürt–Homoki szőlő, XIII/1b: Veresegyház, Szentendre, Kompolt–Kistér, XIII/1c: Gáborján–Csapszékpart, XIII/1d: Üllő–Site 5, Kamenica nad Hronom, Type XIII/2: Kál–Legelő, Oszlár–Nyárfaszög, Tiszaürt–Sarkadpuszta, Boldog–Vasútállomás, Type XIII/2a: Kál–Legelő

H. 23–34 cm



## *XII. Small pots (Fig. 32)*

Smaller elongated pots with cylindrical or low, curved neck and smoothed vessel body are assigned to this category. Their height is usually around 20 cm. One- and two-handled variants of these smaller pots are both known.

### *Type XII/1*

Spherical pot with outturned rim and low neck (H. 22 cm). The single known specimen was found at Oszlár.<sup>823</sup>

### *Type XII/2*

Small, thin-walled, ovoid pot with outturned rim, decorated with an incised lattice pattern below the shoulder.<sup>824</sup>

### *Type XII/3*

Small ovoid pot with low, cylindrical neck and rounded shoulder (H. 13 cm).<sup>825</sup> The handled variants (Type X/3) were more widespread.

### *Type XII/4*

Handleless, squat, small biconical pot with cylindrical neck (H. 18 cm).<sup>826</sup>

## *XIII. Pots (Figs 33–34)*

### *Type XIII/1 (Fig. 33)*

Several variants can be distinguished based on the surface treatment and the proportions of the vessel body among the wide-mouthed globular pots with cylindrical neck.

#### *Type XIII/1a*

Pot with curved, outturned rim, low neck, prominent neck line, rounded shoulder and rounded body (H. 24–32 cm).<sup>827</sup> Variants included pieces with cylindrical neck,<sup>828</sup> a less globular body<sup>829</sup> and a less prominent neck line.<sup>830</sup> Some are decorated with a crescentic rib on the shoulder.<sup>831</sup>

#### *Type XIII/1b*

A more elongated variant with thickened rim and low, curved, smoothed neck. The elongated rounded body is brushed (H. 30–36 cm).<sup>832</sup>

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<sup>823</sup> Koós (1998) Abb. 7. 4.

<sup>824</sup> Abda–Hármasok: Figler (1996a) Pl. II. 1.

<sup>825</sup> Mezőkövesd–Mocsolyás: Koós (1998) Abb. 1. 2.

<sup>826</sup> Oszlár–Nyárfaszög: *ibidem* Abb. 7. 3.

<sup>827</sup> Tizsakürt–Homoki szőlő, Pit 2: Csányi (1996) Pl. II. 8.

<sup>828</sup> Táp–Borbapuszta, Pit M: Figler (1994) Abb. 5. 3.

<sup>829</sup> Battonya–Aradi Road: G. Szénászký (1987–88) Fig. 8. 3.

<sup>830</sup> Tizsakürt–Homoki szőlő, Pit 2: Csányi (1996) Pl. II. 1; Kál–Legelő III, Graves 17 and 31: Kulcsár–Szabó (2000) Fig. 3. 5–6.

<sup>831</sup> Szeged–Kiskundorozsma–Nagyszék I: Tóth (2003) Fig. 3. 3.

<sup>832</sup> Kompolt–Kistér, Feature 7: Gogáltan (1999a) Pl. 16. 17; Szentendre–Belterület: MRT 7, Site 28/3, Pl. 8. 14; Veresegyház–Ivacsok: MRT 9, Site 37/2, Pl. 13. 17; Malé Kosihy: Točík (1981b) Taf. IX. 16.

Type XIII/1c

Pot with curved, conical neck and rounded shoulder. The neck is smoothed, the vessel body underneath is rusticated. Small knobs are set on the neck line (H. 34 cm).<sup>833</sup>

Type XIII/1d

Pot with slightly tapering neck and rounded shoulder.<sup>834</sup> One such vessel is decorated with a crescentic rib.<sup>835</sup>

*Type XIII/2 (Fig. 33)*

Another typical type among the pots has a narrow mouth, a low neck and a more elongated body. Small knobs, flat disc shaped knobs or a short rib are occasionally placed on the neck line.<sup>836</sup> A vessel from Tizsakürt can probably be regarded as the handled variant of this type.<sup>837</sup>

Type XIII/2a

Pot with a narrow neck and a elongated body (H. 34 cm). A small knob is sometimes perched on the rim.<sup>838</sup>

*Type XIII/3 (Fig. 34)*

Pot with strongly outturned, often thickened rim and indrawn, low curved neck. The shoulder is rounded, the body is elongated. Several variants can be distinguished based on the differences in rim and neck forms (Types XIII/3a–3c).

The use of similar pots with indrawn neck is attested in the Bell Beaker–Csepel group for example.<sup>839</sup>

Type XIII/3a

Pot with outturned, thickened rim, low neck and elongated body, decorated with a flat knob on the rim/shoulder.<sup>840</sup> Similar pots have been found in late Corded Ware contexts, for example in Graves 3 and 7 of the Krumvíř cemetery in south-eastern Moravia.<sup>841</sup>

Type XIII/3b

Pot with low, outcurving neck and elongated brushed/rusticated body.<sup>842</sup>

<sup>833</sup> Gáborján–Csapszékpart: *Dani* (1998) Abb. 2. 1.

<sup>834</sup> Üllő–Site 5, Pit 5605: *Kővári–Patay* (2005) Fig. 36. 10.

<sup>835</sup> Kamenica nad Hronom: *Vladár* (1966) Abb. 17. 2.

<sup>836</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 15. 2, 4, Fig. 16. 2; Boldog–Vasútállomás: *Kalicz* (1998a) Fig. 14. 9, Fig. 15. 7; Budapest–Aranyhegyi Road: *Kalicz–Schreiber* (1994) Abb. 4. 11, Abb. 10. 2; Oszlár–Nyárfaszög: *Koós* (1999) Fig. 16. 10; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. V. 3.

<sup>837</sup> Tizsakürt–Homoki szőlő: *Csányi* (1996) Pl. I. 1.

<sup>838</sup> Kál–Legelő III, Graves 15 and 32: *Kulcsár–Szabó* (2000) Fig. 3. 3, Fig. 4. 6.

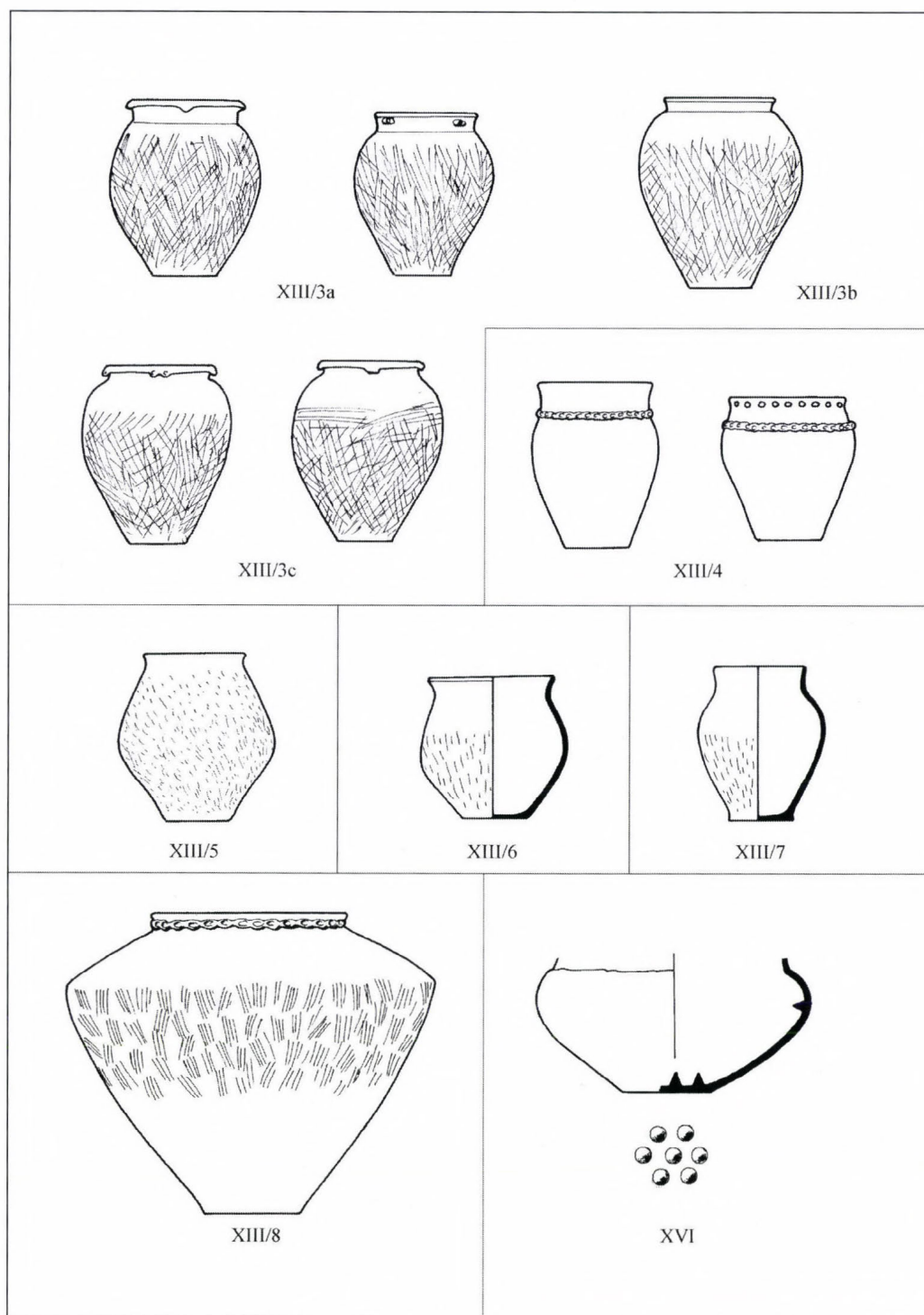
<sup>839</sup> Budapest–Békásmegyer, Grave 64: *Kalicz–Schreiber* (1976a) Abb. 15. 4.

<sup>840</sup> Bánov: *Vladár* (1966) Abb. 11. 4; Čaka: *ibidem* Abb. 14. 4; Malé Kosihy: *ibidem* Abb. 12. 7; *Točík* (1981b) Tab. VIII. 10; Biatorbágy–Hosszúrétek-dűlő: *Horváth–Reményi–Tóth* (2004) Fig. 6. 1.

<sup>841</sup> *Šebela* (1981a) Abb. 2. 2, 7.

<sup>842</sup> Budapest–Budaörs Airfield: *Kalicz* (1984a) Taf. XXII. 9; Szentendre (fragments): MRT 7, Site 28/22, Pl. 8. 8.





*Fig. 34. Vessel types of the Makó-Kosihy-Čaka culture*

Types XIII/3–8: pots and Type XVI: marinating vessel

Type XIII/3a: Čaka, XIII/3b: Budapest–Budaörs Airfield, XIII/3c: Budapest–Budaörs Airfield,  
XIII/4: Pişcolt–Nişipărie, Grave 33, XIII/5: Pişcolt–Nişipărie, Grave 65, XIII/6: Battonya–Aradi Road,  
XIII/7: Battonya–Aradi Road, XIII/8: Pişcolt–Nişipărie, Grave 121

Type XVI: Üllő–Site 5

H. 21–52 cm

Type XIII/3c

Pot with thickened rim, low, curved neck and elongated body, decorated with a flat knob or, more rarely, with an impressed knob on the rim.<sup>843</sup>

*Types XIII/4–8 (Fig. 34)*

These vessels are even more infrequent in the ceramic repertoire of the Makó–Kosihy–Čaka culture. They are known from the south-eastern and eastern fringes of the culture's distribution.

Type XIII/4

Pot with slightly outturned rim, low, curved neck and angular shoulder. A finger impressed cordon encircles the neck. One specimen is perforated below the rim (H. 21 cm).<sup>844</sup>

Type XIII/5

Biconical pot with slightly outturned rim and elongated body. The neck is not prominent.<sup>845</sup>

Type XIII/6

Pot with outcurving neck and angular shoulder.<sup>846</sup>

Type XIII/7

Pot with cylindrical neck, rounded shoulder and elongated body.<sup>847</sup> Good parallels to this form can be quoted from the Somogyvár–Vinkovci culture (cp. Types SV XIV/5, 7, 12).<sup>848</sup>

Type XIII/8

The grave goods of the burials uncovered at Pişcolt include a deep vessel with constricted mouth, conical shoulder and prominent carination. A finger-impressed cordon is set below the rim. The vessel surface is brushed/combed underneath the shoulder (H. 52 cm).<sup>849</sup> The vessel is unparalleled in the Early Bronze Age and even though its shape cannot be unambiguously regarded as a classical pot shape, it has been included in this category.

*XIV. Amphoras (Figs 35–36)*

Vessels with two or four handles, probably used for storing food or liquids, are classified as amphoras. In addition to the few intact and restorable pieces recovered from burials (or presumably originally deposited in burials), the pottery assemblages from settlements include several amphora fragments whose form cannot be precisely reconstructed (such as narrow, cylindrical neck fragments, strap handles set on the shoulder and belly, and base fragments). The height of the restorable pieces ranges between 25 cm and 55 cm.

<sup>843</sup> Bajna (fragments): MRT 5, Site 1/47, Pl. 9. 12; Budapest–Budaörs Airfield: *Schreiber* (1972) Fig. 1. 12; Perőcsény–Jancsi-hegy: MRT 9, Site 23/19, Pl. 13. 7, 9, 4; Szentendre: MRT 7, Site 28/22, Pl. 8. 9; Táp–Borbapuszta (fragments): *Figler* (1994) Abb. 4. 13, Abb. 5. 1, 2, 5, Abb. 6. 6, 7; Kamenín: *Nevizánsky* (2001) Tab. IV. 9–10.

<sup>844</sup> Pişcolt, Grave 33: *Németi* (1979) Fig. 1. 4, Fig. 2. 6.

<sup>845</sup> Pişcolt, Grave 65: *ibidem* Fig. 2. 3; Valea lui Mihai: *Roska* (1932) 78, Fig. 8.

<sup>846</sup> Battonya–Aradi Road: *G. Szénásky* (1987–88) Fig. 8. 4.

<sup>847</sup> Battonya–Aradi Road: *ibidem* Fig. 8. 5.

<sup>848</sup> Szava: *Ecsegy* (1979a) Taf. I. 7, Taf. VI. 8.

<sup>849</sup> Pişcolt, Grave 121: *Németi* (1979) Fig. 3. 2.



Aside from their primary use as storage jars on settlements, as indicated by the pieces from Čaka, Budapest–Budaörs Airfield and Battonya, amphoras were often deposited in graves, both in scattered cremation and inurned burials, as at Bicske, Čaka, Hódmezővásárhely–Gorzsa-Cukor-tanya, Kánya, Kompolt–Kistér, Létavértes, Oros and Szarvas.

Three major forms can be distinguished in the Makó–Kosihy–Čaka distribution:

- (a) An ovoid form with cylindrical neck and rounded shoulder. The strap handles are set on the belly (Types XIV/1–2);
- (b) A variant of the above type, a wider-mouthed amphora with handles set on the shoulder and the neck line (Types XIV/3–4);
- (c) A slightly different type is the squat rounded amphora with cylindrical neck and rounded shoulder with the handles set on the neck line and the shoulder (Types XIV/6–7).

Amphoras with cylindrical neck and rounded shoulder (Types XIV/1–2) were highly popular during the Early Bronze Age. Their use has been documented from the late Vučedol period.<sup>850</sup> They occur on the settlements and in the burials of the Somogyvár–Vinkovci culture (cp. SV Types XV/1–3) and in the burials of the Nyírség culture too.<sup>851</sup> An ovoid amphora with cylindrical neck and two handles on the carination was recovered from the inurned burial at Besenyőd dating from a later period<sup>852</sup> and a comparable amphora type was found on a site of the Zábala/Zabola group.<sup>853</sup> Similar finds from Eastern Europe include a vessel found beside the crouched inhumation burial under one of the mounds in the Sărăteni cemetery.<sup>854</sup> Amphoras with handles set on the shoulder represent a distinctive type of the Makó–Kosihy–Čaka culture (Types XIV/3–4), being less frequent elsewhere. Amphoras with a squat rounded body have mostly been found in the central and eastern Makó–Kosihy–Čaka distribution, e.g. at Hódmezővásárhely–Gorzsa and Szarvas (Type XIV/7). Good parallels to Types XIV/6 and XIV/7 can be quoted from the Moravian Corded Ware culture.<sup>855</sup>

Even though no matching pieces to them are known, the amphoras from the inhumation burial at Sárretudvari–Órhalom, a site assigned to the Makó–Kosihy–Čaka period, must also be mentioned here<sup>856</sup> because their workmanship and overall nature indicate that they can be dated to this period.<sup>857</sup>

#### *Types XIV/1–2 (Fig. 35)*

##### Type XIV/1

Amphora with slightly thickened rim, cylindrical neck and rounded shoulder. The two strap handles are set opposite each other on the carination. Several variant can be distinguished based on the form of the vessel body.

<sup>850</sup> Zók–Várhegy; Vučedol: *Vučedol* (1988) cat. 80, cat. 175.

<sup>851</sup> Vencsellő–Kastélypark: *Kalicz* (1968) Taf. XV. 10. *Dani* (1998) suggested a date in the Neolithic for this find.

<sup>852</sup> Bóna (1975a) Taf. 199. 10; *idem* (1986) 27; cp. *Dani* (2005c).

<sup>853</sup> *Dani* (1997b) Pl. XXX. 6.

<sup>854</sup> Sărăteni, Tumulus 2: *Levițki–Manzura–Demčenko* (1996) 86, Fig. 16. 4.

<sup>855</sup> Šebela (1999b).

<sup>856</sup> *M. Nepper* (1991); *Lichardus–Vladár* (1996) Taf. 1; *Kalicz* (1998b) 174, Abb. 11.

<sup>857</sup> For a new interpretation, cp. *Dani–M. Nepper* (2006).

#### Type XIV/1a

Elongated ovoid amphora, with the vessel body either smoothed<sup>858</sup> or brushed.<sup>859</sup> A handleless amphora-like variant is also known (Type XV/1). One vessel of this type was deposited in the scattered cremation burial from Moravská Nová Ves–Hrušky.<sup>860</sup> It was popular in the western Makó–Kosihy–Čaka distribution.

Comparable amphoras occur in the grave pottery deposited in the inhumation burials of the Corded Ware group settling in the Lower Traisen Valley.<sup>861</sup>

#### Type XIV/1b

Amphora with rounded shoulder,<sup>862</sup> appearing in both the smoothed<sup>863</sup> and brushed variety.<sup>864</sup> The handles are sometimes replaced by small knobs on the carination, underneath which the vessel body is brushed.<sup>865</sup>

#### Type XIV/1c

Amphora with rounded shoulder, with variants having knobs on the shoulder line and perhaps below the rim. The handles are set on the carination. The type is known from Battonya in the culture's eastern distribution and its parallels too point towards the east.<sup>866</sup>

Comparable vessels have been reported from the cave sites of the Roşia group,<sup>867</sup> which also yielded good analogies to the ribbed handle found at the Battonya site.<sup>868</sup> Ribbed handles are also encountered later, in the pottery of the Nagyrév culture.<sup>869</sup>

#### Type XIV/1d

Squat ovoid amphora with narrow cylindrical neck. Two strap handles are symmetrically set on the belly (H. 22.5 cm). The single known specimen comes from the Tiszalúc–Sarkadpuszta settlement.<sup>870</sup>

#### Type XIV/2

Amphora with conically tapering neck and angular shoulder. The handles are set on the vessel body below the shoulder, an unusual placement. The vessel body is smoothed on the neck and rusticated underneath. An infrequent type, known only from Grave 4 of the Čaka site.<sup>871</sup>

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<sup>858</sup> Čaka: *Vladár* (1966) Abb. 14. 8.

<sup>859</sup> Malé Kosihy: *Točík* (1961a) Abb. 5. 3.

<sup>860</sup> *Stuchlík–Stuchlíková* (1996) Obr. 27.

<sup>861</sup> Franzhausen, Graves 246 and 357: *Neugebauer–Neugebauer* (1997) Taf. 478. Verf. 246, Taf. 505. Verf. 357.

<sup>862</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 16. 1, 3.

<sup>863</sup> Kánya: *Csalog* (1941) Pl. VI. 2.

<sup>864</sup> Čaka: *Vladár* (1966) Abb. 14. 6.

<sup>865</sup> Čaka: *ibidem* Abb. 14. 2.

<sup>866</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 14. 5.

<sup>867</sup> *Emödi* (1985) Fig. 2. 1, 7, Fig. 16. 1, Fig. 18. 45.

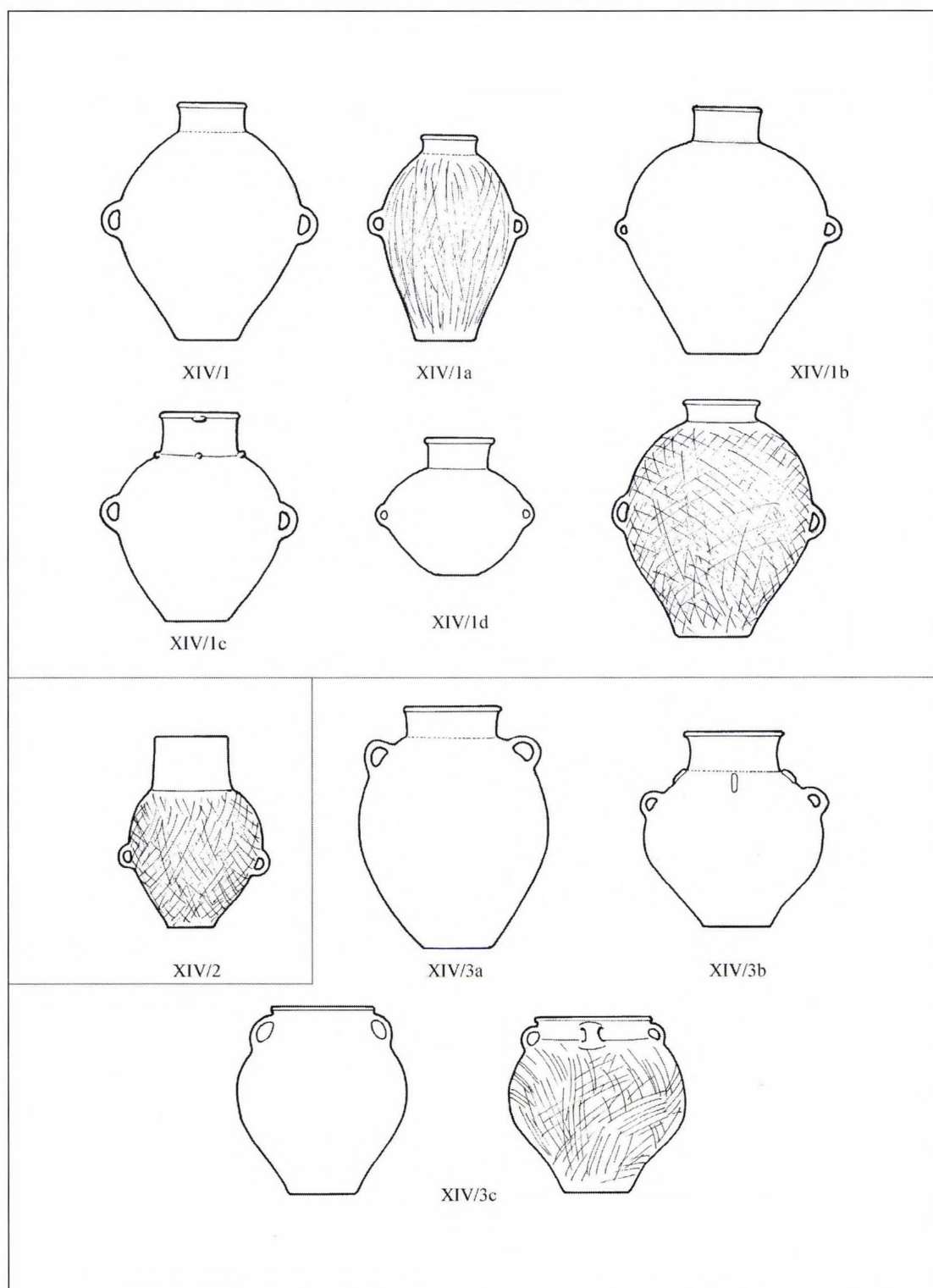
<sup>868</sup> Pot or amphora fragment: Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 14. 2. Cp. *Emödi* (1985) Fig. 18. 43; *Roman–Németi* (1986) Fig. 10. 2.

<sup>869</sup> *Bóna* (1963) Pl. II. 3; *Kalicz–Schreiber* (1981) Taf. 5. 1.

<sup>870</sup> *Szathmári* (1999b) Taf. XVIII. 4.

<sup>871</sup> *Vladár* (1966) Abb. 24.





*Fig. 35. Vessel types of the Makó-Kosihy-Čaka culture. Types XIV/1–3: amphoras*  
 Type XIV/1: Čaka, XIV/1a: Malé Kosihy, XIV/1b: Kánya, Čaka, XIV/1c: Battonya-Georgievics-tanya,  
 XIV/1d: Tiszalúc-Sarkadpuszta, XIV/2: Čaka, Type XIV/3a: Bicske-Szőlőhegy,  
 XIV/3b: Kompolt-Kistér, XIV/3c: Rákóczifalva, Carei-Bobald  
 H. 22.5–40 cm

### *Types XIV/3–5 (Figs 35–36)*

#### Type XIV/3a

Ovoid amphora with cylindrical neck. The vessel body is smoothed, the two handles are set on the shoulder.<sup>872</sup>

The urn from Bicske in Transdanubia probably originated from a grave. A similar vessel, the single grave good of an inhumation burial, comes from a Moravian Corded Ware context.<sup>873</sup>

#### Type XIV/3b

Squat, ovoid amphora with cylindrical neck. The two handles are set on the shoulder. A pair of vertical ribs is set symmetrically on the shoulder and above the handles (H. 29 cm).<sup>874</sup>

#### Type XIV/3c

Wide-mouthed amphora. The neck joins the vessel body with a curve. The two handles are placed on the neck (H. 26–30 cm).<sup>875</sup> A four-handled variant with a more prominent neck line was found in Grave M1 at Carei–Bobald.

#### Type XIV/4

Wide-mouthed, globular amphora with wide neck. Four small handles are set on the shoulder (H. 25–34 cm). The vessel, part of the grave pottery deposited in the Létavértes burial,<sup>876</sup> shares formal traits with the amphora-like vessel with narrower neck from Grave 90 of the Pişcolt–Nişipărie cemetery.<sup>877</sup> Another specimen with narrower cylindrical neck from Endrőd–Site 161, deformed owing to secondary burning, can also be assigned here.<sup>878</sup> A few fragmentary vessels with curved neck, rounded shoulder and small handles set on the shoulder probably also represent this type.<sup>879</sup>

#### Type XIV/4a

A taller variant of the amphora with cylindrical, narrower neck and rounded shoulder (H. 44 cm),<sup>880</sup> which has four symmetrically placed small strap handles on the shoulder. Three horizontal ribs extend between the handles on the shoulder. The vessel body is lightly brushed.

#### Type XIV/5

Amphora with narrow mouth, curved neck and elongated rounded body (H. 45 cm). The four handles are set either directly below the rim on the neck<sup>881</sup> or spring from the rim.<sup>882</sup> The closest analogies to this

<sup>872</sup> Bicske–Szőlőhegy: *Kalicz* (1968) Taf. X. 8.

<sup>873</sup> Slatinky I, Grave 2: *Šebela* (1999b) Pl. 97. 8, Pl. 183. 8.

<sup>874</sup> Kompolt–Kistér, Grave 1: *Gogáltan* (1999a) Pl. 17. 2.

<sup>875</sup> Rákóczi-falva: *Kalicz* (1968) Taf. III. 12; Carei–Bobald, Grave M1: *Németi–Dani* (2001) Fig. 3.

<sup>876</sup> Létavértes–Irinyi Street: *Dani* (1998) Abb. 1. 1, Abb. 3. 4. For a similar vessel with more cylindrical neck, cp. Szeged–Kiskundorozsma–Subasa, Grave 234: *Tóth* (2002) Fig. 8. 1; fragment: Üllő–Site 5: *Kővári–Patay* (2005) Fig. 39. 2.

<sup>877</sup> *Németi* (1979) Fig. 3. 5; cp. also Szeged–Kiskundorozsma–Nagyszék II, Grave 1615: *Tóth* (2002) Fig. 7. 1.

<sup>878</sup> Endrőd–Site 161: *Bondár* (1999) Fig. 9. 1.

<sup>879</sup> Battonya–Georgievics-tanya: *Bondár–D. Matuz–Szabó* (1998) Fig. 15. 1; Domony: *Kalicz* (1968) Taf. VII. 13, 15; a fragmentary piece from Mezögyán–Gépműhely: *G. Szénászkzy* (1987–88) Fig. 9. 2, 8.

<sup>880</sup> Kál–Legelő III, Grave 53: *Kulcsár–Szabó* (2000) Fig. 5. 2.

<sup>881</sup> Pişcolt: *Németi* (1979) Fig. 3. 1.

<sup>882</sup> County Szabolcs: *Kalicz* (1968) Taf. XVI. 7.



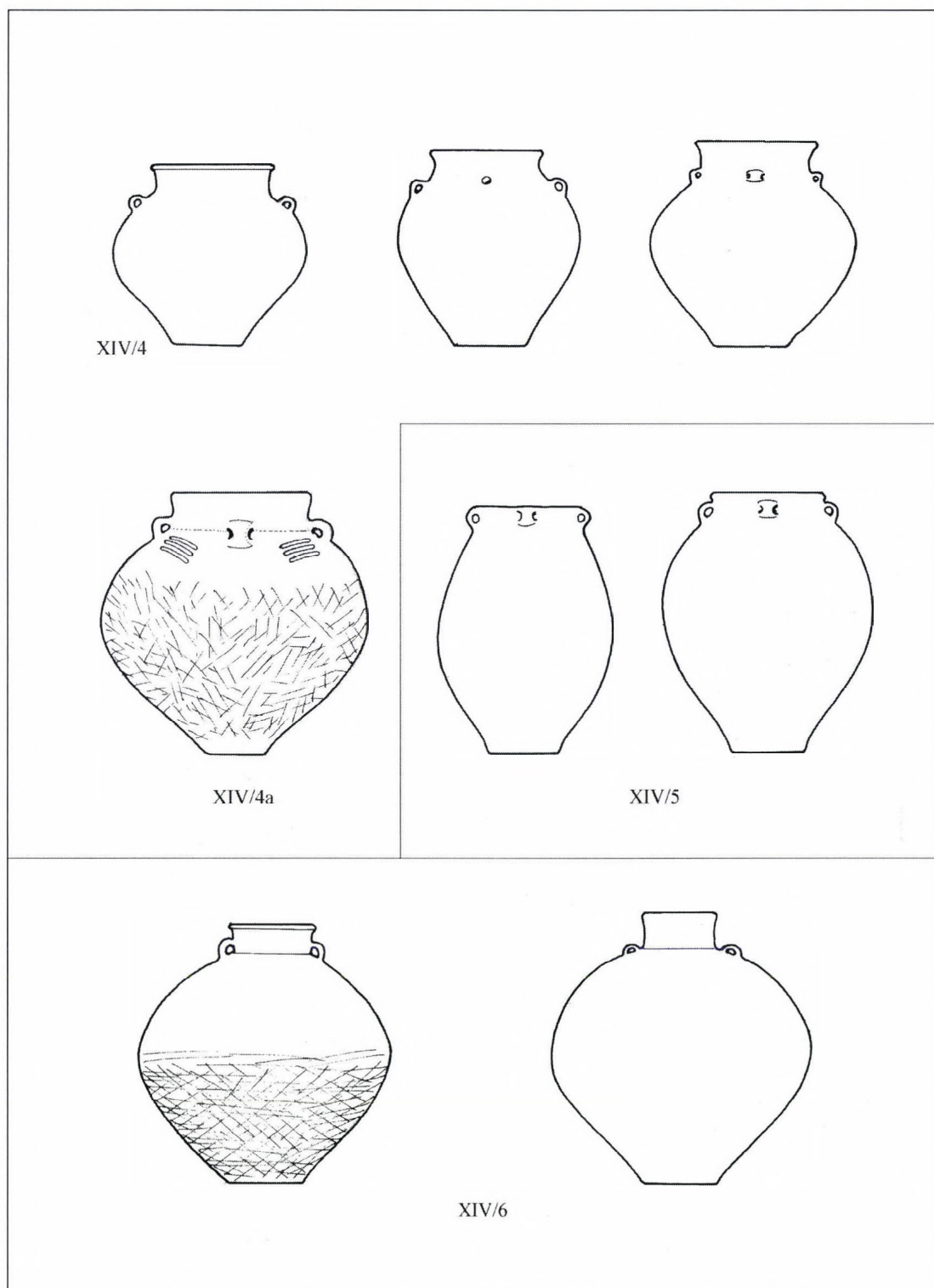


Fig. 36. Vessel types of the Makó-Kosihy-Čaka culture. Types XIV/4–6: amphoras  
 Type XIV/4: Létavértes–Irinnyi Street, Pişcolt–Nişipărie, Grave 90, Szeged–Kiskundorozsma, Subasa,  
 XIV/4a: Kál–Legelő III, Grave 53, XIV/5: Pişcolt–Nişipărie, County Szabolcs,  
 XIV/6: Budapest–Budaörs Airfield, Oros  
 H. 25–46 cm

amphora variant, appearing in the culture's eastern distribution, can be quoted from the inhumation burials of the Roşia group uncovered in Călăţea/Kalota Cave.<sup>883</sup>

#### *Types XIV/6–7 (Figs 36–37)*

##### *Type XIV/6*

Large amphora with narrow cylindrical neck and rounded shoulder (H. ca. 50 cm). The small handles are placed on the neck line or the shoulder. Some are smoothed (Oros)<sup>884</sup> and some have a brushed lower part underneath the carination (Budapest–Budaörs Airfield).<sup>885</sup> A handleless variant is also known (cp. Type XV/3).

No vessels matching this urn type are known from the south. The best analogies come from late Corded Ware culture of Moravia and include a variant with the handles perched on the shoulder,<sup>886</sup> as well as smoothed vessels with loop handles on the carination in addition to the handles on the shoulder.<sup>887</sup>

##### *Type XIV/7*

Large biconical vessels with low, cylindrical or curved neck and lug handles or small knobs on the shoulder (H. 60 cm) have been assigned to this category. Vessels of this type have so far only been recovered from burials, as at Hódmezővásárhely–Gorzsa-Cukor-tanya.<sup>888</sup> Intact stray pieces, such as the one from Szarvas,<sup>889</sup> were probably also part of a grave furniture. Their distribution falls into the eastern and south-eastern Makó–Kosihy–Čaka territories. The Gorzsa grave, a scattered cremation burial, also contained a vessel with asymmetrical handles, more typical for the late Makó–Kosihy–Čaka period, and a handled mug.

#### *XV. Amphora-like vessels (Fig. 37)*

Large vessels with cylindrical neck and rounded body which are lacking handles have been assigned to this category, as have vessels of this type on which the position of the handles cannot be established owing to their fragmentary nature. Amphora-like vessels have been found both on settlements (e.g. Čaka and Táp–Borbapuszta) and among the pottery placed in burials (Kompolt–Kistér, Mezőkövesd–Mocsolyás, Šaľa).

##### *Type XV/1*

Ovoid vessel with narrow, cylindrical neck. The neck is smoothed, underneath which the vessel body is rusticated. The handleless variant of one amphora type (XIV/1).<sup>890</sup>

<sup>883</sup> Roman–Németi (1986) Fig. 12. 4.

<sup>884</sup> Kalicz (1968) 68, Fo. 87, Taf. XVI. 9. For a more elongated variant, cp. Szeged–Kiskundorozsma–Nagyszék II, Grave 1616: Tóth (2002) Fig. 7. 4.

<sup>885</sup> Schreiber (1972) Fig. 1. 9.

<sup>886</sup> Kalicz (1968) 92–93; Šebela (1981a) Abb. 2. 5; Brno–Chrlice: Šebela (1999b) Pl. 183. 9; for a variant with asymmetrical handles, cp. Ondráček (1960) Obr. 174. 1.

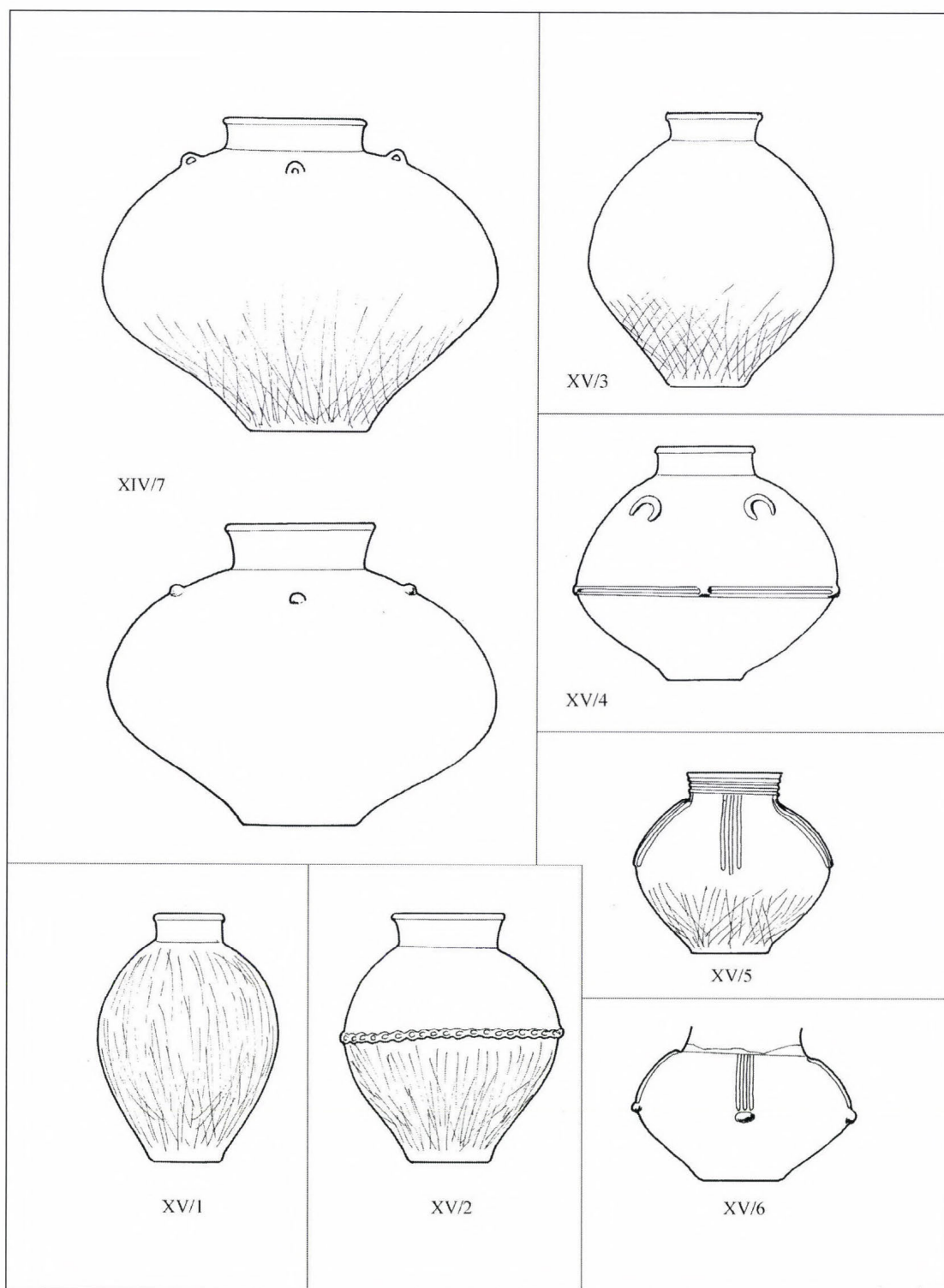
<sup>887</sup> Moravia: Ondráček (1966) Obr. 187. 9; Šebela (1981a) Abb. 2. 1; Bohemia: Buchvaldek (1981a) Taf. 3. 13.

<sup>888</sup> Gazdapusztai (1959); Kalicz–Schreiber (1991) 12, Fig. 18. 6.

<sup>889</sup> Szarvas: MRT 8, Site 8/XLII, Pl. 19. 2.

<sup>890</sup> Čaka: Vladár (1966) Abb. 13.





*Fig. 37. Vessel types of the Makó-Kosihy-Čaka culture*

Type XIV/7: amphora and Type XV: amphora-like vessels

Type XIV/7: Hódmezővásárhely–Gorzsa, Cukor-tanya, Szarvas;

Type XV/1: Čaka, XVI/2: Čaka, XV/3: Táp–Borbapuszta, XV/4: Šal'a,

XV/5: Kompolt–Kistér, XV/6: Kompolt–Kistér

H. 19.5–60 cm

#### Type XV/2

Vessel with narrow, cylindrical neck and rounded shoulder. An impressed cordon, interrupted by two knobs, encircles the carination. The vessel body is smoothed above the cordon and rusticated underneath.<sup>891</sup>

#### Type XV/3

Vessel with outturned rim, narrow, cylindrical neck and rounded, elongated shoulder. The vessel body is rusticated underneath the carination.<sup>892</sup> The handleless variant of one amphora type (XIV/6).

#### Type XV/4

Vessel with cylindrical neck and rounded, elongated shoulder. A double cordon interrupted by small knobs encircles the carination. The shoulder is decorated with concentric and crescentic ribs (H. 41 cm).<sup>893</sup>

Similarly to the vessel from the Wien, 21–Leopoldau burial, the amphora from the Šaľa grave has more in common with the similar vessels of the Herzogenburg group of the Austrian Corded Ware culture (recently renamed the Lower Traisen Valley group) and the Moravian Corded Ware culture<sup>894</sup> rather than with Makó–Kosihy–Čaka wares. The concentric rib on the shoulder is another element pointing towards the Moravian Corded Ware culture, in which it appears on the shoulder of handled pots.<sup>895</sup> In the light of the analogous finds, the vessel can be assigned to the Moravian Corded Ware culture.

#### Type XV/5

Amphora-like vessel decorated with ribs. One restorable variant, a 30 cm high biconical vessel with flaring neck decorated with sets of three and four slender ribs on the neck and shoulder, was recovered from one of the burials at Kompolt–Kistér.<sup>896</sup> A vessel with cylindrical neck from the Tiszalúc–Sarkadpuszta settlement is likewise decorated with triple ribs<sup>897</sup> and the same slender ornamental ribs appear on another vessel with conical shoulder<sup>898</sup> and on the strap handles of a handled vessel whose form cannot be reconstructed.<sup>899</sup>

These thin-walled vessels coming in various forms with a decoration of slender ribs show a concentration on sites in the northerly areas of the Great Hungarian Plain. The specimen from Kompolt suggests that they can be dated to the culture's late phase, characterised by strong ties with the Somogyvár–Vinkovci complex.<sup>900</sup> The cultural traits of the vessel type point in two directions: vessels with broadly matching form and decoration are encountered in the pottery of the Moravian and Bohemian Corded Ware groups which were either contemporaneous with the Makó–Kosihy–Čaka culture or slightly later (Bohemian and Moravian Corded Ware III).<sup>901</sup>

Slender ribs were used for adorning vessels by the potters of the Jigodin/Schneckenberg B/Šoimuș period in Transylvania. A similar triple rib can be seen below the rim and on the shoulder of a slightly

<sup>891</sup> Čaka: *Vladár* (1966) Abb. 14. 2.

<sup>892</sup> Táp–Borbapuszta, Pit M: *Figler* (1994) Abb. 5. 14.

<sup>893</sup> Šaľa: *Vladár* (1966) Abb. 30. 1.

<sup>894</sup> Velešovice: *Dvořák–Šebela* (1992) Abb. 3. 15, 16.

<sup>895</sup> Letonice, Grave 6: *Buchvaldek* (1978) Obr. 8. 7–8.

<sup>896</sup> Kompolt–Kistér, Feature 115: *Gogáltan* (1999a) Pl. 17. 8.

<sup>897</sup> *Szathmári* (1999b) Taf. IX. 14, Taf. XII. 4.

<sup>898</sup> *Ibidem* Taf. VIII. 8, Taf. IX. 15.

<sup>899</sup> *Ibidem* Taf. I. 3, Taf. II. 6.

<sup>900</sup> Comparable ribbed fragments have recently been recovered from Feature 26/77 of the Kamenín site: *Nevizánsky* (2001) 21–22, Tab. II.

<sup>901</sup> *Buchvaldek* (1981a) Taf. 3; *idem* (1992) Abb. 3; *Venci* (1992) Tab. III. 1–2. Cordons set on vessel necks perhaps imitated the cord-impressed vessel necks of the Corded Ware culture.



differing vessel with curved flaring neck from the Leliceni/Csíkzentlélek–Muntele settlement.<sup>902</sup> The same triple rib occurs on other vessels too: on the shoulder of handled jugs, below the handle of larger vessels, on the neck of vessels with folded out rim.<sup>903</sup> Although the vessel forms differ, triple ribs as decorative elements occur in several other cultures of the Early Bronze Age 1–2 too.<sup>904</sup>

#### Type XV/6

Fragments of the lower parts of such vessels with rounded shoulder are known from the pit uncovered at Kompolt–Kistér,<sup>905</sup> the inurned burial at Mezőkövesd–Mocsolyás<sup>906</sup> and from the material collected during the survey of the Kömlő area (*Pl.* 4. 7). Three vertical ribs are set on the rounded shoulder of a vessel with probably cylindrical neck. The ribs occasionally terminate in a flat knob, as at Mezőkövesd. The exact shape of this vessel type cannot be reconstructed from the surviving fragments.

### XVI–XVII. Miscellaneous vessels

#### Type XVI. Marinating vessel (*Fig.* 34)

The base fragment of a vessel with interior knobs was found at the Endrőd–Site 161 settlement without context. The vessel's smoothed interior is covered with knobs of various sizes.<sup>907</sup> A similar vessel is known from the mixed Makó/Nagyrév material of the Hódmezővásárhely–Barci-rét site.<sup>908</sup> The fragment of a larger vessel with knobbed interior was recovered from a late Makó–Kosihy–Čaka pit of the Üllő settlement (fragment H. 24.2 cm).<sup>909</sup>

Vessels with knobbed interior used for marinating appeared in greater number at the close of the Early Bronze Age, immediately before the emergence of tell settlements. Their use became widespread during the Middle Bronze Age.<sup>910</sup>

#### Type XVII. Strainers (*Fig.* 38)

Two variants of strainers, previously only known from stray finds, could be distinguished among the ceramic finds from the Endrőd–Site 161 settlement. The first was represented by a thick-walled piece with perforations through the base and the side,<sup>911</sup> the second by a small, thin-walled, handled vessel.<sup>912</sup> No other similar pieces are known.<sup>913</sup>

<sup>902</sup> Roman–Dodd–Oprîtescu–János (1992) Taf. VII. 1, Taf. 104. 1–3, Taf. 106. 1, Taf. 112, Taf. 121. 3.

<sup>903</sup> *Ibidem* Taf. VIII. 9, Taf. IX. 1–4, 7, 10, Taf. XI. 7–10, Taf. XII. 1–18, Taf. 83. 3, Taf. 84. 1, 7, Taf. 85. 3, Taf. 98. 1, Taf. 102. 1. etc.

<sup>904</sup> The ribs decorating Şoimuş and Roşia pottery differ from this rib type.

<sup>905</sup> Gogâltan (1999a) Pl. 16. 11.

<sup>906</sup> Koós (1998) Abb. 1. 3.

<sup>907</sup> Endrőd–Site 161: Bondár (1999) 51, Fig. 9. 2.

<sup>908</sup> Kulcsár (1997) Pl. XIV. 2.

<sup>909</sup> Pit 4067: Kővári–Pataj (2005) Figs 33–34.

<sup>910</sup> Pataj–Pataj (1965); Kulcsár (1997) 34.

<sup>911</sup> Endrőd–Site 161: Bondár (1999) Fig. 6. 1.

<sup>912</sup> Endrőd–Site 161: *ibidem* Fig. 4. 8, 10.

<sup>913</sup> A fragment with an incised linear pattern perhaps from a vessel of this type comes from Magyarcsanád–Bökény: Kürti (1974) Fig. 19.

## Miscellaneous clay objects

### XVIII. Clay spoon (Fig. 38)

Clay spoons are rarely encountered in the domestic pottery of the Makó–Kosihy–Čaka culture. A few broken pieces have been found at the Tarnabod–Berekalja, the Tiszakürt–Homoki szőlő and the Domony settlement. Most are oval with a pointed handle.<sup>914</sup>

### XIX. Clay loom-weights and sinkers (Fig. 38)

Conical loom-weights and sinkers with round or oval base (H. 10–15 cm) are rare finds. Most come from sites in the Great Hungarian Plain.<sup>915</sup> A higher number has been found on the Csongrád–Sertéstelep settlement.<sup>916</sup>

### XX. Clay hook (Fig. 38)

Fragments of clay hooks have so far only been recovered from Pits 6 and 15 of the Csongrád–Sertéstelep settlement.<sup>917</sup> Similar clay artefacts are known from the settlements of the Vučedol culture.<sup>918</sup>

### XXI. Spindle whorls (Fig. 38)

Aside from a handful of round, perforated clay discs, specifically made to be used as spindle whorls,<sup>919</sup> the other finds in this category include pieces made from the body sherds of broken vessels.<sup>920</sup> The single biconical spindle whorl came to light in Pit 1 of the Táp–Borbapuszta settlement.<sup>921</sup>

### XXII. Wheel models (Fig. 38)

Two clay discs with a raised rim around the central perforation (Diam. 8 cm) from the Domony<sup>922</sup> and Kamenín settlements<sup>923</sup> have been interpreted as wheel models.

### XXIII. Figurines (Fig. 38)

In addition to the culture's earlier known figurines from Velem (XXIII/3), two new figurine fragments have recently been found (XXIII/1–2). These differ from the types found at Velem and have no known parallels from this period.<sup>924</sup>

<sup>914</sup> Domony: *Kalicz* (1968) Taf. VI. 3; Tarnabod–Berekalja: *Kalicz* (1998a) Fig. 9. 4–5; Tiszakürt–Homoki szőlő: *Csányi* (1996) 56, Pl. XIII. 15.

<sup>915</sup> Battonya–Fővezeték II: *G. Szénásky* (1987–88) 146, Fig. 4. 2; Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) 63, Taf. XVII. 6; Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1994) 41; Čaka: *Vladár* (1962) 333, Tab. VI. 15.

<sup>916</sup> *Tóth* (2001b) 124, Fig. 14. 3–5, Fig. 16. 5.

<sup>917</sup> *Ibidem* 124, Fig. 10. 6, Fig. 19. 5–6, Fig. 20. 3.

<sup>918</sup> *Schmidt* (1945) 102, Taf. 48, Abb. 14–15; Sarvaš: *Vučedol* (1988) 71, cat. 15.

<sup>919</sup> Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1991) Abb. 10. 17; Bánov: *Vladár* (1966) Abb. 11. 7; Malé Kosihy: *Točík* (1981b) Tab. VIII. 11; Mosonszentmiklós–Gyepföldek: *Aszt* (2001) 217; Üllő–Site 5, Pit 7479: *Kővári-Patay* (2005) 113.

<sup>920</sup> Bag–Peres-dűlő: *Kalicz* (1968) Taf. IX. 12; Kompolt–Kistér: *Gogáltan* (1999a) Pl. 16. 18.

<sup>921</sup> *Figler* (1994) Abb. 6. 17.

<sup>922</sup> *Kalicz* (1968) Taf. VI. 2.

<sup>923</sup> *Nevizánsky* (2001) 24–26, Obr. 3.

<sup>924</sup> For another, yet unpublished figurine type from Budapest–Kőérberek, cp. *Zsidi* (2005) 84, lower figure; *Reményi* (in press).



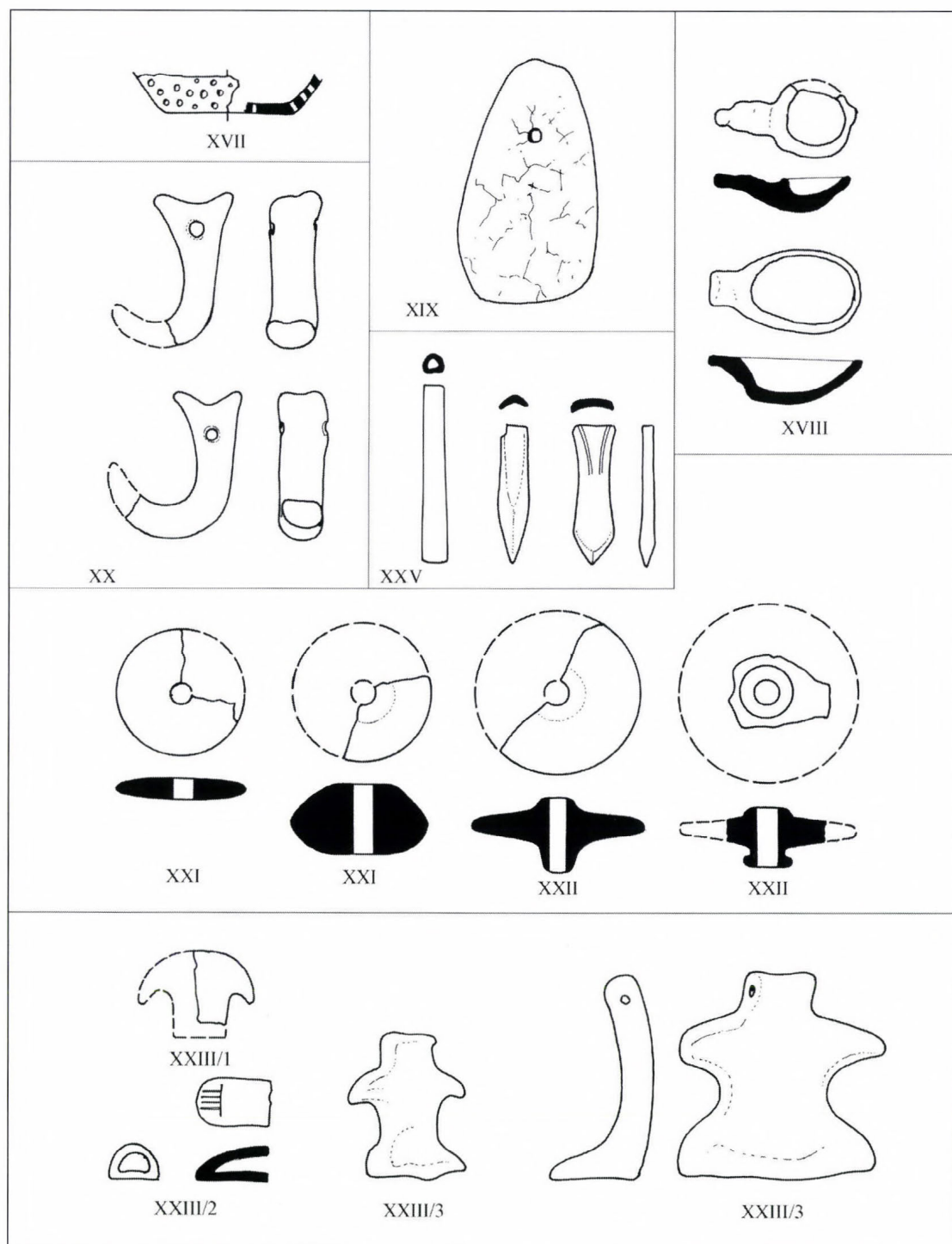


Fig. 38. Vessel types of the Makó-Kosihy-Čaka culture  
Type XVII: strainer and Types XVIII–XXV: miscellaneous clay objects

Type XVII: Endrőd–Site 161;

Type XVIII: Tarnabod–Berekalja, Type XIX: Tiszalúc–Sarkadpuszta, Type XX: Csongrád–Sertéstelep,

Type XXI: Budapest–Aranyhegyi Road, Táp–Borbapuszta, Type XXII: Domony, Kamenín,

Type XXIII: XXIII/1: Oszlár–Nyárfaszög, XXIII/2: Sommerein, XXIII/3: Velem,

Type XXV: Csongrád–Sertéstelep, Budapest–Aranyhegyi Road

H. 4–14 cm

#### Type XXIII/1

##### Headless figurine.

The fragment of the upper torso with schematic arms of a headless figurine was found at Oszlár–Nyárfaszög.<sup>925</sup> The figurine has no analogies among the Early Bronze Age finds from the Carpathian Basin.

#### Type XXIII/2

##### Figurine with hollow body.

A hollow foot fragment was found near the Sommerein settlement in Austria.<sup>926</sup> No analogous finds to this figurine are known either.

#### Type XXIII/3

##### Solid figurines.

The figurines of the Makó–Kosihy–Čaka culture were for a long time represented by the two pieces found at Velem,<sup>927</sup> whose cultural attribution remains controversial because the material from this site is made up of stray finds. Their findspot too poses difficulties in the cultural ordering of the Velem finds since there are still many gaps in the Early Bronze Age history of the fringe areas of western Transdanubia, especially regarding contacts between the late Vučedol culture and the Makó–Kosihy–Čaka culture and, later, the Somogyvár–Vinkovci culture.

Regarding their formal traits, the Velem figurines share many resemblances with the figurines of the Somogyvár–Vinkovci culture. One striking difference is that the head of the Velem figurines is not triangular, but oblong, and that the depiction of the secondary sexual characteristics is lacking. Figurines with an oblong, obliquely perforated head and a slender waist set on a wide oval base are typical for the Late Eneolithic hallmarked by the Ljubljana/Laibach group, a contemporary of the late Vučedol culture. The period's figurines were decorated (with the breasts occasionally indicated<sup>928</sup> and occasionally not<sup>929</sup>). The Velem figurines can thus be likened to the similar pieces of the Ljubljana/Laibach group, a neighbouring culture. Although they are simpler, suggesting a slightly later date perhaps in the early Somogyvár–Vinkovci culture.<sup>930</sup>

## Lithics

Few stone artefacts have so far been brought to light on the culture's settlements. Broken stone axes are known from Tarnabod–Berekalja and Üllő.<sup>931</sup> Other sites yielded quernstone fragments and grinders,<sup>932</sup> while the pit excavated at Kompolt–Kistér contained a large stone and the fragment of a

<sup>925</sup> Koós (1998) Abb. 6. 1.

<sup>926</sup> Rutkay (1995b) 198, Abb. 31. 6.

<sup>927</sup> *Mozsolics* (1945) 44, Fig. 1; *Kalicz* (1968) Taf. X. 5, 7.

<sup>928</sup> Ig: *Korošec–Korošec* (1969) T. 1. 1, T. 2. 1.

<sup>929</sup> Ig: *ibidem* T. 1. 3.

<sup>930</sup> Matching pieces to the Velem figurines can be found among the figurines from Benczúrfalva and Patvarc of the later Hatvan culture: *Kalicz* (1968) Taf. CXIII. 3–4.

<sup>931</sup> Tarnabod–Berekalja: *Kalicz* (1998a) 13, Fig. 12. 8; Üllő–Site 5: *Kővári–Patay* (2005) Fig. 16. 1, Fig. 23. 2.

<sup>932</sup> E.g. Csongrád–Saroktanya: *Gazdapusztai* (1966) 241, Fig. 5. 11; Csongrád–Sertéstelep: *Tóth* (2001b) Fig. 19. 1–2, 4; Üllő–Site 5: *Kővári–Patay* (2005) Fig. 16. 2, Fig. 23. 1; Čaka: *Vladár* (1962) 333, Tab. VI. 13.



large, thick, rectangular slab, whose function is unknown.<sup>933</sup> Smaller chipped stone implements, such as blades, chisels and points are barely known from Makó–Kosihy–Čaka settlements.<sup>934</sup> Most were made from Mecsek radiolarite, indicating contact with southern Transdanubia.

### ***Bone (Fig. 38)***

Similarly to lithic artefacts, bone tools and implements are rare finds in the Makó–Kosihy–Čaka culture. Most of the known pieces are bone awls and pointed implements.

The currently known bone artefacts were predominantly brought to light on settlements. Awls and their fragments have been found at Domony,<sup>935</sup> Nové Zámky<sup>936</sup> Male Kosihy<sup>937</sup> and Csongrád–Sertéstelep,<sup>938</sup> while a pointed bone tool came to light at the Budapest–Aranyhegyi Road settlement.<sup>939</sup> The polished bone cylinder from Csongrád–Sertéstelep is a unique, unparalleled find.<sup>940</sup>

Only in one instance was a bone tool, an awl made from a cattle fibula, deposited in a burial.<sup>941</sup> The tools from Csongrád were manufactured from sheep bones.<sup>942</sup>

### ***Metallurgy and metalwork***

New metal artefact types appeared in the northern Balkans and the Carpathian Basin from the initial third of the 3rd millennium BC, at the close of the Copper Age and the onset of the Bronze Age, among which the shaft-hole axe was undoubtedly the most distinctive. Many excellent studies have been written on the period's supra-regional metalwork and metallurgy,<sup>943</sup> with several studies devoted to the origins of this metalwork,<sup>944</sup> the cultural dynamics of its appearance in the Carpathian Basin and the classification of various metal types.<sup>945</sup>

The typical Early Bronze Age metal artefacts made from copper and from copper-arsenic alloys<sup>946</sup> appear in the Makó–Kosihy–Čaka distribution too. The moulds for casting shaft-hole axes from the settlements at Domony, Vel'ky Meder and Üllő, as well as the copper plaque recovered from Šal'a and the pin fragment from Magyarcsanak–Bökény, the latter two found among the grave goods of burials, can be definitely assigned to the Makó–Kosihy–Čaka culture in view of their find contexts. The stray finds of early shaft-hole axes and moulds from the Makó–Kosihy–Čaka distribution can be

<sup>933</sup> Gogáltan (1999a) 19.

<sup>934</sup> Csongrád–Sertéstelep: Tóth (2001b) Fig. 19. 3; Endrőd–Site 161: Bondár (1999) 498, Fig. 3. 10–11; Hódmezővásárhely–Barci-rét: Kulcsár (1997) 22, Pl. VII. 7; for an overview, cp. Tóth (2001b) 124–125.

<sup>935</sup> Kalicz (1968) Taf. VI. 1.

<sup>936</sup> Vladár (1966) Abb. 21. 4.

<sup>937</sup> Točík (1981b) Tab. IX. 13.

<sup>938</sup> Tóth (2001b) Fig. 20. 1.

<sup>939</sup> Kalicz-Schreiber (1991) Abb. 9. 8.

<sup>940</sup> Tóth (2001b) Fig. 20. 2.

<sup>941</sup> Kompolt–Kistér, Grave 2: Bartosiewicz (1999) 297; Gogáltan (1999a) Pl. 17. 7.

<sup>942</sup> Tóth (2001b) 125.

<sup>943</sup> For excellent overviews, cp. Novotná (1970); Vulpe (1970); *idem* (1975); Kuna (1981); Durman (1983); Ecsedy (1983a); *idem* (1990); Černych (1991); Černych *et al.* (1991); Žeravica (1993); Ecsedy (1994a); *idem* (1994b).

<sup>944</sup> Batora (2001); *idem* (2003).

<sup>945</sup> Černych (2003).

<sup>946</sup> For metal analyses, cp. Junghans–Sangmeister–Schröder (1968); and Schalk (1998); Dani–Kis–Varga (2000); Krause (2003); Dani (2005c); Dani–M. Nepper (2006).



broadly dated to the Early Bronze Age 1–2 on typological grounds. These finds clearly suggest that the use of these artefacts was hardly infrequent in the Makó–Kosihy–Čaka culture.<sup>947</sup>

The analogies to the metal finds from the burials of the Sárretudvari–Órhalom tumulus attest to the intricate network of cultural interconnections of the mid-3rd millennium: the dagger has its best parallels in Eastern Europe, the copper axe is matched by pieces from Eastern, East-Central and Western Europe, while the lockring has its counterparts among similar finds from Central and South-East Europe.<sup>948</sup> The dagger from Balkány in eastern Hungary<sup>949</sup> is matched by the weapon from the tumulus burial at Mala Gruda in Montenegro.<sup>950</sup> Together with the dagger, the shaft-hole axe from the same site can be regarded as the metal grave goods of an elite burial of the type appearing in the Early Bronze Age 1–2, whose cultural attribution cannot be precisely established.<sup>951</sup>

### *Shaft-hole axes*

The most typical metal finds from the Makó–Kosihy–Čaka distribution are variants of the Fajsz and Kömlöd axes, most of which are stray finds. In addition to the hoards from Fajsz,<sup>952</sup> Dunakömlöd<sup>953</sup> and Tápé, the latter made up of two axes and a chisel,<sup>954</sup> several stray finds of axes are known from the Great Hungarian Plain,<sup>955</sup> northern Transdanubia,<sup>956</sup> Slovakia<sup>957</sup> and Austria.<sup>958</sup> The cultural

<sup>947</sup> Kovács (1996); Kalicz–Schreiber–Kalicz (1997) 330, Abb. 7; *idem* (1999) 85, Fig. 4.

<sup>948</sup> M. Nepper (1991); Lichardus–Vladár (1996) Taf. 1. 7; Kalicz (1998b); Dani–M. Nepper (2006). Cp. also Zimmermann (2003); Harrison–Heyd (2007); Maran (2008).

<sup>949</sup> Kalicz (1968) Taf. I. 15.

<sup>950</sup> Primas (1996) Abb. 6. 13. B, A15.

<sup>951</sup> Cp. also Ecsedy (1994b) 40.

<sup>952</sup> Nagy (1913) 308–309, Fig. V. 21–23.

<sup>953</sup> Roska (1957).

<sup>954</sup> Nagy (1913) 308, Fig. V. 19–20; Kovács (1996) Abb. 2.

<sup>955</sup> Akasztó–Sörkésdomb: Horváth (1988) 19; H. Tóth (1990) Site 2; Bácsalmás: Kürti (1974) 45, Fig. 23; Balkány: Kalicz (1968) Taf. I. 3; Debrecen: Vulpe (1970) 41; Eger: Mozsolics (1967) 15, Abb. 1. Ba; Schalk (1998) 38; Emőd: Koós (1993) 5–6, Pl. 1. 2; Hatvan: Roska (1956) 43; Kovács (1996) note 4; Hódmezővásárhely: V. Szabó (1999) Fig. 1. 1; Karancslapujtő: Kőszegi (1957) 47, Pl. 6. 6; Szihalom: Kalicz (1968) Taf. I. 2; Tolmács: Kovács (1996) note 4; Szeghalom–Varjas major: MRT 6, Site 11/61, 152.

<sup>956</sup> Transdanubia: Acsád: Roska (1957) 7; Balaton region: Kőszegi (1957) 48, Pl. 7. 3; Budapest–Csepel: *ibidem* 48, Pl. 7. 4; Budapest–Óbuda: *ibidem* 48, 60; Érd: *ibidem* 47, Pl. VI. 2; Lovasberény: Kovács (1996) note 4; Kisbér: Novotná (1957) 313–315, T. 1. 1–2; Székesfehérvár: Kovács (1996) note 4; County Tolna: *ibidem* note 4.

<sup>957</sup> Slovakia: Dolný Pial/Alsópél (Fajsz type): Vladár (1970b); Págo (1970) 20, Tab. 1–2; Senec/Szenc (Bányabükk type): Schalk (1998) 39; Veľký Slavkov/Nagyszalók (transitional variant of the Fajsz and Stublo types): Novotná (1957) Taf. 2. 3a–b; Novotná (1970) 29, Nr. 141, Taf. 8.141; Schalk (1998) 39; Žitvany/Zsitvakenéz (two axes of the Bányabükk and Fajsz type): Novotná (1957) 309, Taf. 2. 1–2; Novotná (1970) 27, Nr. 137–18; Schalk (1998) 39. Emily Schalk distinguished two groups among the shaft-hole axes from the northern regions of the Carpathian Basin based on the metal composition; the Fajsz type axes from Brno–Lišen and Dolný Pial differ from the Bányabükk and Kömlöd type axes found at Senec and Žitvany, which have a higher antimony, silver and arsenic content: Schalk (1998) 37–38. It is therefore still uncertain to what extent Fajsz type axes can be associated with eastern metalwork of the same type (on the basis of the arsenic, nickel and lead content). For a discussion of possible eastern origins, cp. Novotná (1957) 341; *idem* (1970) 28; Vladár (1970b); Págo (1970); Batora (2002); *idem* (2003).

<sup>958</sup> Hauskirchen–Ried Reinberg (Fajsz type): Huysza (1990) 181, Abb. 184.



attribution of these Fajsz and Kömlőd type axes is uncertain<sup>959</sup> for they can be broadly dated within the period from the close of the Late Copper Age to the Early Bronze Age 1–2, the latest one being the piece from Emőd.

Several typochronological variants have been distinguished among shaft-hole axes. However, more recent finds have clearly demonstrated that the typological and chronological framework created for shaft-hole axes should be expanded and interpreted more broadly.<sup>960</sup> It is near impossible to associate individual axes with a production centre, especially in view of the fact that most of the known axes are stray finds. Even so, a production centre can be identified for a few types (e.g. Kozarac axes were undoubtedly manufactured in Bosnia). The different axe forms began to proliferate from the late Vučedol period. The early assemblages, as well as the emergence and regional concentration of early workshops suggest that the diffusion of early shaft-hole axes can be linked to the Vučedol culture and the culture's far-flung cultural and trade connections. The cultural contacts were at first probably manifested in actual artefacts and, later, by the adoption and mastering of manufacturing techniques. While the reconstruction of this process is little more than educated guesswork at the moment, one point emerges clearly: concurrently with the adoption of metalworking technologies, there emerged several cultural units sharing a number of similar elements in the northern Balkans and the Carpathian Basin,<sup>961</sup> an archaeological imprint of a period characterised by an intensive information flow. In this sense we may speak of a communication zone across the Glina III–Schneckenberg B/Jigodin/Şoimuş/Somogyvár–Vinkovci/Makó–Kosihy–Čaka/Nyírség/Gyula–Roşia distribution during this period.

### *Chisels*

The cultural attribution of the flat chisels in the hoards from Fajsz<sup>962</sup> and Tápé<sup>963</sup> to the Makó–Kosihy–Čaka culture is also uncertain.

### *Pins*

The grave goods of the inurned burial found at Magyarcsanak–Bökény included a broken metal pin.<sup>964</sup> Another broken pin comes from Mužla–Čenkov–Vilmakert, but it is unclear from the preliminary report whether the pin fragment from Feature 954 dates from the Makó–Kosihy–Čaka culture or a later period.<sup>965</sup> The current archaeological record would suggest that metal pins were not particularly widespread at the onset of the Bronze Age. Bronze pins began to be demonstrably used from the close of the Early Bronze Age in the Carpathian Basin.<sup>966</sup>

<sup>959</sup> For recent overviews: *Ecsedy* (1994b); *Kovács* (1996); *Kalicz-Schreiber-Kalicz* (1997) Abb. 3; *Dani* (2005c).

<sup>960</sup> Different axe types may well have been used simultaneously, as shown by the three different axe types in the Dunakömlőd assemblage and the moulds for casting different axe types from Zók–Várhegy: *Ecsedy* (1983a); *idem* (1990); *idem* (1994b); *Kovács* (1996) 115–116.

<sup>961</sup> The distribution of this axe type has been linked to the appearance of a handled jug type found in roughly the same territories: *Kalicz-Schreiber-Kalicz* (1997) 330, Abb. 3.

<sup>962</sup> *Nagy* (1913) 308–309, Fig. V. 21–23.

<sup>963</sup> *Ibidem* 308, Fig. V. 19–20; *Kovács* (1996) Abb. 2.

<sup>964</sup> *Kürti* (1974) 38–39, Fig. 17.

<sup>965</sup> *Kuzma* (1992) 61.

<sup>966</sup> *Szathmári* (1988).

### *Copper plaque with perforated edges*

The scattered cremation burial uncovered at Šal'a contained a copper plaque with perforated edges.<sup>967</sup> The rectangular, thin, flat copper plaque has three perforations along its lower longitudinal edge. Vladár interpreted the find as a knife/razor owing to its longish form. Fragments of similar artefacts were recovered from Grave 7 of the Krumvíř cemetery,<sup>968</sup> from the burials uncovered at Vážany nad Litavou,<sup>969</sup> and at Brno–Veverí Street,<sup>970</sup> all dating from the late Moravian Corded Ware period.

### *Moulds and other metalworking artefacts (crucibles and tuyères)*

Moulds for casting shaft-hole axes have been recovered from Makó–Kosihy–Čaka contexts on three sites: Domony<sup>971</sup> and Üllő<sup>972</sup> in central Hungary, and Vel'ký Meder in south-western Slovakia.<sup>973</sup> Two stray moulds for shaft-hole axes from the southern part of the Great Hungarian Plain<sup>974</sup> and western Slovakia<sup>975</sup> can probably also be assigned to the Makó–Kosihy–Čaka culture. The cultural attribution of three moulds for making awls and a flat axe from Salgótarján–Pécskő, a site occupied successively by a late Baden, Makó–Kosihy–Čaka and Hatvan community, is uncertain,<sup>976</sup> as is that of the mould for a Kömlöd–Kozarac axe found at Hidegség–Templomdomb in western Hungary.<sup>977</sup>

Of particular importance among these finds is the cache of moulds and a crucible brought to light at Üllő–Site 5, a Makó–Kosihy–Čaka site lying a little south of Budapest. The cache contained moulds for casting flat axes, awls, a socketed chisel, a trapeze shaped flat axe, a shaft-hole axe and a crucible. The axes and chisels cast in these moulds were probably woodworking implements.<sup>978</sup> The age of the intentionally deposited or concealed hoard can be put in the late Makó–Kosihy–Čaka period, corresponding to the end of the Early Bronze Age 2, a date also supported by the radiocarbon dates for the settlement (2470–2340 and 2300–2130 BC).

Tuyères can be regarded as an indication of local metalworking. Finds of this type are known from Tesárske Mlyňany<sup>979</sup> and Kánya (*Pl.* 34. 7).

<sup>967</sup> Vladár (1966) 268, Abb. 30. 2; *idem* (1967) 295–301, Abb. 91–92.

<sup>968</sup> Vladár (1967) 301–302; Šebela (1981a) Abb. 2. 9; Schalk (1998) 82, Taf. 15. 3.

<sup>969</sup> Vladár claimed that the composition of the Šal'a plaque matched that of the plaque from Vážany nad Litavou and of the metal finds in the Michajlovka assemblage of the Ukrainian Yamnaya culture: Vladár (1967) 298–302, cp. Págo (1967). Following a re-examination of the plaque, Schalk noted that the spectrographic analysis of the plaques from Vážany nad Litavou and Šal'a quoted as parallels had a significantly different composition. The composition of the copper plaque from Šal'a corresponded to the SAM C2A/B group ("Handlová-Kupfer"), while that of the piece from Vážany nad Litavou to the SAM C1B group ("Nógrádmárcal-Kupfer"); Schalk (1998) 82.

<sup>970</sup> Šebela (1981a) 185–186.

<sup>971</sup> Kalicz (1968) 48, Taf. X. 1.

<sup>972</sup> Kővári–Patay (2005).

<sup>973</sup> Hromada–Varsik (1994) Sl. 1.

<sup>974</sup> Endrőd–Parajhegy: MRT 8, 147, Site 3/44, Pl. 19. 5.

<sup>975</sup> Nevidzany: Batora (1982b): broken clay mould for a Stublo type axe.

<sup>976</sup> Stray finds and the material from Trench 3: two open moulds with two casting surfaces and one open mould with a single casting surface carved from red sandstone (Korek [1968] 55–56, Taf. XII. 1–3).

<sup>977</sup> Gömöri (2002) 14.

<sup>978</sup> Kővári–Patay (2005).

<sup>979</sup> Batora (1989b) 12.



## ***Cultural connections of the Makó–Kosihy–Čaka culture as reflected by the pottery and other finds***

The growing corpus of Makó–Kosihy–Čaka finds has enabled the identification of previously unknown vessel forms and decorations. The relative dating of various pottery types and their variants, as well as the creation of an internal Makó–Kosihy–Čaka chronology is encumbered by the fact that the number of stray finds is quite high and thus the number of assemblages with a wide range of ceramic types from secure contexts is minimal. This disproportionateness becomes even more critical when attempting to undertake a typochronological analysis of the Makó–Kosihy–Čaka culture, which according to the new calibrated radiocarbon dates spanned some 3–400 years. The current archaeological record merely permits the identification of the basic pottery forms and a broad outline of the cultural contacts with contemporary cultures. Several finds from the Makó–Kosihy–Čaka distribution cannot be classified among the culture's basic vessel forms. These artefacts provide important clues regarding the emergence of the Makó–Kosihy–Čaka culture, as well as for regional and chronological differences.

Several elements contributed to the culture's formation. These include the late Vučedol culture in the south and the late Jevišovice groups in the north-west. The possible role of the late Baden/Kostolac communities in the transition to the Bronze Age in the Carpathian Basin is still unclear because there is no unambiguous indication of this role in the archaeological record. The possible cultural contribution of Eastern European and Transylvanian elements assumed by earlier research is likewise uncertain. The role of the Yamnaya culture settling in eastern Hungary can only be clarified through new assemblages from secure contexts. Neither can the core area(s) where the Makó–Kosihy–Čaka was formed be determined from the current evidence.

Contact with the south and the north-west retained its primacy during the Early Bronze Age 1–2. The Makó–Kosihy–Čaka culture was enriched by new elements from the Somogyvár–Vinkovci, the Corded Ware and the Bell Beaker cultures. Information flow and the adoption of stylistic elements was bidirectional on the testimony of the shared pottery traits. The culture's artefactual material and stylistic traits, as well as its subsistence strategies underwent a transformation at the close of the Early Bronze Age 2. The chronology of the Makó–Kosihy–Čaka contacts with neighbouring cultures enables the broad separation of an early and a late phase. However, a firm basis for the typochronology of the Makó–Kosihy–Čaka sequence can only be established from the publication of assemblages from secure contexts, absolute radiocarbon dates and the detailed analysis of settlements and their finds.

### *The basic Makó–Kosihy–Čaka pottery types*

The cups of Type I/1 and similar vessels with a taller neck (Types I/3–7), as well as Types I/8–10 with a more slender body can be regarded as the basic cup types of the Makó–Kosihy–Čaka culture, as can the slightly less frequent variant described under Type I/15. Most jugs (*Fig. 19*) and vessels with asymmetrical handles (Type II) cannot be classified among the culture's basic vessel forms.

Flask shaped vessels (Type IV) and their variants can certainly be ranked among the culture's distinctive pottery wares. Type IV/1 of flask shaped vessels, recovered mostly from burials, shows a concentration on the eastern and southern Makó–Kosihy–Čaka distribution. Types IV/2–3 with a cylindrical neck can also be assigned to the Makó–Kosihy–Čaka culture, even though they exhibit several southern, Somogyvár–Vinkovci traits.



Most bowls can be regarded as distinctively Makó-Kosihy-Čaka wares. Variants of bowls with thickened rim (Type VII/1) and biconical bowls (Types VII/18–24) can be found across the entire Makó-Kosihy-Čaka distribution. Rare forms, such as the handled bowl from the Tata-Tófarok burial (Type VII/32), can probably also be assigned to the basic Makó-Kosihy-Čaka forms. A distinctively Makó-Kosihy-Čaka variant of interior decorated bowls (Type IX) can definitely be distinguished among these vessels.

Virtually all variants of one-handled pots can be assigned to the basic wares of the Makó-Kosihy-Čaka culture. Types X/1–3 of one-handled pots and their two-handled variants (Type XI/1) were more popular in the culture's eastern territories, while the smaller mug-like one-handled pots (Type X/4) appear to have been predominantly used in the western distribution. Type X/5 has so far only been encountered in northern Transdanubia.

Two-handled pots (Types XI/1–5) can likewise be regarded as part of the culture's basic ceramic inventory. Types XI/1–3 are principally known from the east, while Type XI/4 is represented by pieces from the central and western territories.

Variants of the less well represented handleless small pots (Types XII/1–4) are tentatively also assigned to the Makó-Kosihy-Čaka inventory, although it must be noted that a particular type is often represented by a single vessel only.

The two main pot shapes and their surface treatment shares many resemblances with the pottery of the neighbouring late Vučedol/Somogyvár-Vinkovci/Moravian Corded Ware/Bell Beaker cultures (Types XIII/1–3). This resemblance can hardly be mere chance because one of the most oft-used vessel types undoubtedly preserved the traditions of practicality for a long time. Regional differences can probably be derived from the local traditions of the preceding periods and these were no doubt transmitted to later periods too. Regional differences of this type can be noted in rim forms and in the concentration of certain types in the culture's eastern and south-eastern distribution (Types XIII/4–8).

Two to three main amphora types can be distinguished in the Makó-Kosihy-Čaka distribution. Differing but slightly from each other, these vessels represent the general types of the Late Eneolithic/Early Bronze Age. Ovoid amphoras have been documented in both the western and the eastern Makó-Kosihy-Čaka distribution (Type XIV/1). Amphoras with handles set on the shoulder (Types XIV/3–4) are particular to the Makó-Kosihy-Čaka culture, being very rare in the pottery of contemporary neighbouring cultures.

Rare pottery types include vessels with interior knobs (marinating vessels) and a few strainers, the latter more widespread during the later Bronze Age. Very little is known about the lithic and bone artefacts used in day to day life, and even less about figurines and other ritual paraphernalia.

#### *Contact with the late Vučedol culture*

The late Vučedol culture undeniably played a role in the emergence of the Makó-Kosihy-Čaka culture. The parallels to the mugs of Type I/6 and the flat bowls of Type VII/7b appearing in southern Hungary point towards the Vučedol culture, as do vessels with asymmetrical handles of Type II/1. Pot-like vessels with asymmetrical handles of Type II/6 can best be compared to similar pieces appearing from the Vučedol B2 period on Vučedol settlements. In contrast, small conical bowls (Type VIII) were most likely transmitted to the Makó-Kosihy-Čaka by the Somogyvár-Vinkovci culture, despite the obvious parallels with Vučedol wares. Interior decorated bowls were no doubt inspired by late Vučedol traditions. A number of general similarities can be noted between the Makó-Kosihy-Čaka pots and those of the Vučedol culture. The Early Bronze Age amphora types of the Carpathian



Basin can be essentially derived from the late Vučedol tradition. Vessels matching amphoras of Type XIV/1 appear from the late Vučedol period, and comparable amphoras became widespread in the Somogyvár–Vinkovci culture too (SV Types XV/1–3). The popularity of bird shaped vessels, again descendants of similar Vučedol vessels, apparently declined at the onset of the Early Bronze Age; the askos from Rabe can only be tentatively assigned to the Makó–Kosihy–Čaka culture. The stray figurine from Velem (Type XXIII/3), whose cultural attribution is likewise uncertain, was probably modelled on the ones current in the late Vučedol period. The appearance of clay hooks in Makó–Kosihy–Čaka contexts, again an artefact type with precursors in the Vučedol period, are another reflection of the cultural impacts.

Hungarian research has regarded the overall typological connections of the various classes of Makó–Kosihy–Čaka artefacts with the Vučedol culture as being rather weak, emphasizing that contact with the later, Vinkovci A period was much stronger (one case in point being the rich assortment of bowls).<sup>980</sup> Interior decorated bowls represent the perhaps most evident link, even though it has been pointed out that there are major typological differences between the types of the two cultures,<sup>981</sup> a wholly acceptable argument in the sense that the Makó–Kosihy–Čaka bowls are only partially co-eval with the interior decorated bowls of the Vučedol culture ornamented with the “Kerbschnitt” technique. It must also be borne in mind that Makó–Kosihy–Čaka bowls can be seen as simplified versions of their Vučedol counterparts both as regards their form and certain decorative elements.

In the light of the above the late Vučedol groups migrating northward can be regarded as one of the major cultural components of the Makó–Kosihy–Čaka culture. The same late Vučedol population, into which other elements of southern origins blended with time, can be seen as the ethnic substratum of the Somogyvár–Vinkovci culture too. The ties between the Makó–Kosihy–Čaka and Somogyvár–Vinkovci cultures, two complexes with a near identical network of cultural contacts, were not severed as shown by the presence of Somogyvár artefacts across the entire Makó–Kosihy–Čaka distribution.

Cultural contacts with the late Vučedol culture provide a useful basis for describing the salient traits of the early Makó–Kosihy–Čaka period. The typical pottery assemblages of the early Makó–Kosihy–Čaka period comprised vessels sharing similarities with the late Vučedol wares of the southerly regions of the Great Hungarian Plain, such as mugs and cross-footed interior decorated bowls, as well as bowls decorated with crescentic ribs and knob-decorated small pots specific to the Makó–Kosihy–Čaka culture, such as the pieces from Hódmezővásárhely–Égető- and Diószegi-tanya and Makó–Vöröskereszt.

An early Makó–Kosihy–Čaka presence can also be assumed in the eastern distribution prior to the appearance of the Nyírség culture and thus the north-western Romanian sites (Pișcolt) and the eastern Hungarian ones (Debrecen area, Polgár area and Tiszalúc–Sarkadpuszta) can also be assigned to the early period. For the time being, the pottery types of the early Makó–Kosihy–Čaka period, co-eval with the late Vučedol period (corresponding to the Early Bronze Age 1) cannot be unambiguously distinguished from later types.

#### *Contact with the Somogyvár–Vinkovci culture*

The later period of cultural contacts with the south was characterised by the connections forged with the Somogyvár–Vinkovci culture.

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<sup>980</sup> Bóna (1972) 12; Ecsedy (1979a) 107.

<sup>981</sup> *Ibidem* 107.



The contacts between the two cultures are evidenced by certain cup, mug and jug types, as well as a few variants of vessels with asymmetrical handles. These vessels can generally be found among the grave goods and less frequently on settlements. It seems unlikely that they were all imports. They had probably been made locally and their appearance in the Makó-Kosihy-Čaka ceramic inventory reflects intensive and dynamic contacts between the two cultures.

Several mug types (Types I/4–5, 7, 10) bear a resemblance to the ceramics of the Somogyvár culture. Handled mugs and jugs with explicit counterparts in Somogyvár–Vinkovci culture form a separate category (Fig. 19). Among the finds from the northerly region of the Great Hungarian Plain, a jug with tall curved neck and conical lower half from the Kompolt–Kistér burial can be assigned here (Fig. 19. 9),<sup>982</sup> as can a biconical handled mug with cylindrical neck from Szarvaskő near Eger (Fig. 19. 10) and the jug from the Jászdózsa burial (Fig. 19. 11).<sup>983</sup> Two stray cups from the Szarvas area in southern Hungary too reflect southern influences (Fig. 19. 4),<sup>984</sup> similarly to the jug from the burial uncovered at Békéscsaba–Alvégi legelő majorok (Fig. 19. 5).<sup>985</sup>

The grave pottery of a few burials in eastern Hungary, whose cultural attribution is uncertain, comprises jugs of this type, such as the ones from Nagyhegyes–Elep (Fig. 19. 7)<sup>986</sup> and Tiszacsege (Fig. 19. 6).<sup>987</sup> There are no exactly matching pieces to the Elep jug with cylindrical neck and rounded shoulder. The biconical jug with cylindrical neck from Tiszacsege is paralleled by similar vessels of the Roşia group<sup>988</sup> and the Vinkovci culture of Slavonia and the Srem.<sup>989</sup>

One rare vessel type in the Makó-Kosihy-Čaka distribution is a biconical mug with curved neck (Fig. 19. 8),<sup>990</sup> whose counterparts are known from the Somogyvár–Vinkovci settlements in Slavonia and the Srem.<sup>991</sup> The incidence of this mug variant at Tizsakürt and Szeghalom was cited to support the late dating of these sites. The presence of a Somogyvár type mug in the ceramic assemblage from Tiszalúc, a Makó-Kosihy-Čaka settlement predating the Nyírség period, would suggest a later date for the settlement than originally proposed.<sup>992</sup>

A handled cup with cylindrical neck and asymmetrical body was found in a pit containing Makó-Kosihy-Čaka type finds at Szeghalom–Környe (Fig. 19. 2);<sup>993</sup> a similar piece is known from Battonya–Georgievics-tanya (Fig. 19. 1). Analogies can be quoted from Radanovac<sup>994</sup> and Pişcolt (Fig. 19. 3). Variants can also be found in the Roşia group.<sup>995</sup>

Fragments of vessels with divided handle, a type known from the southern Transdanubian Somogyvár–Vinkovci sites and the sites of the Somogyvár–Ada group have been reported from the Tizsakürt–Homoki szőlő and Battonya–Aradi Road sites in the Makó-Kosihy-Čaka distribution.<sup>996</sup>

<sup>982</sup> Kompolt–Kistér, Feature 115: *Gogáltan* (1999a) Pl. 17. 5.

<sup>983</sup> *Dani–Kulcsár* (2000).

<sup>984</sup> Szarvas–Káka, Kettőshalom: MRT 8, Site 8/108, Pl. 19. 7; Szarvas: MRT 8, Site 8/25, Pl. 19. 6.

<sup>985</sup> A similar piece is known from Hódmezővásárhely–Égető B.-tanya: *Banner* (1939) Fig. 3. 3.

<sup>986</sup> *Kalicz* (1968) Taf. XIII. 10

<sup>987</sup> *Ibidem* Taf. XIII. 8.

<sup>988</sup> *Roman–Németi* (1986) Fig. 11. 3; a similar vessel with asymmetrical handles: *Emődi* (1985) Fig. 5. 35.

<sup>989</sup> For a more elongated variant from Batrovci: *Tasić* (1984) Taf. IV. 8.

<sup>990</sup> Tizsakürt–Homoki szőlő: *Csányi* (1996) Pl. XIV. 3; cp. Tiszalúc–Sarkadpuszta: *Szathmári* (1999b) Taf. XVII. 2; Szeghalom–Környe, etc.

<sup>991</sup> Vinkovci: *Dimitrijević* (1982a) T. 5. 4.

<sup>992</sup> *Szathmári* (1999a) Fig. 3.

<sup>993</sup> *G. Szénásky* (1987–88) Fig. 8. 1.

<sup>994</sup> *Horváth* (1984a) Tab. II. 1.

<sup>995</sup> Cp. *Molnár–Ghemiş* (2003) Pl. 9.

<sup>996</sup> *Csányi* (1996) Pl. II. 4; *G. Szénásky* (1987–88) Fig. 6. 1.



Biconical mugs and jugs with low cylindrical neck too represent a rare southern type (Fig. 19, 20). Two variants can be distinguished in the Makó–Kosihy–Čaka distribution: one with the handle springing from the rim, the other with the handle set below the rim. Each of the known vessels of this type can be regarded as a unique variant. The single grave good in Grave 5 (a cremation burial) of the Čaka site was a jug of this type.<sup>997</sup>

The grave pottery of the inhumation burial at Ivanka pri Nitre was not made up of explicitly Makó–Kosihy–Čaka types. The wide-mouthed, squat biconical mug (Fig. 19, 19)<sup>998</sup> found beside the vessel with asymmetrical handles (Fig. 20, II/5) has its counterparts among the Somogyvár–Vinkovci mugs and jugs from the culture's settlements in southern Baranya and the Vinkovci area (e.g. SV Type II/10a).

The pottery from Budapest–Aranyhegyi Road, the Esztergom area, Környe, Tata–Tófarok and Kajárpéc–Pokolfadomb, and especially the cups, mugs and jugs, comprise several vessels recalling the ceramic types of the Somogyvár–Vinkovci culture (Fig. 19, 12–18; cp. SV Types I/1, 6, 9, 12, 15, 16, II/1–2).

Good parallels to the vessels with asymmetrical handles of Types II/3–4 can be quoted from the Somogyvár–Vinkovci culture. The shape of the anthropomorphic vessel with tall neck from the grave uncovered at Budapest–Aranyhegyi Road (Type V) recalls the mugs and jugs of the Somogyvár–Vinkovci culture and matching vessels also occur in the Moravian Corded Ware culture.

Many similarities exist between the bowl types of the two cultures. Thickened rims, so typical for the Makó–Kosihy–Čaka culture, were not alien to the Somogyvár–Vinkovci culture either. This rim form is one of the distinctive traits of biconical bowls. Variants of wide-mouthed, biconical bowls (Types VII/19, 19a, 20a, 24) were common in the Somogyvár–Vinkovci culture too (cp. SV Types VII/14a, 17, 18).

The counterparts of the wide-mouthed, deep bowls of Types VII/26–27, found almost exclusively in the south-eastern Makó–Kosihy–Čaka distribution, occur on the Vinkovci settlements in the Srem.

The continued use of interior decorated bowls reflects the lasting popularity of this fine ware. Disregarding the basic form of the vessel itself, several differences can be noted between the interior decorated bowl types preferred by the two cultures, enabling the cultural and chronological separation of different variants.

The two-handled pot (Types XI/2, 5) is likewise matched by the similar vessels of the Somogyvár–Vinkovci culture (SV Types XI/1–2).

While there are many resemblances between the pots of the two cultures, the Somogyvár potters seem to have had a predilection for rusticated surfaces and smeared barbotine, while Makó–Kosihy–Čaka potters preferred brushing or roughening the surface by some other techniques. There are also many shared traits with narrow-mouthed pots with curved neck (Type XIII/3, cp. SV Types XIV/14–15).

The typological analysis revealed that the Early Bronze age amphoras of the Carpathian Basin share many similar traits. Amphoras differing only in minor details were widely used: one case in point is Type XIV/1, whose counterparts can be found among Types SV XV/1–3 in the Somogyvár distribution.

Artefacts of southern origin occur in the contact zone between the two cultures. The Somogyvár type artefacts appearing in more distant areas reflect another type of interaction between the two

<sup>997</sup> Čaka, Grave 5: *Vladár* (1966) Abb. 25.

<sup>998</sup> *Ibidem* Abb. 28. 1.



cultures. The latter were mostly recovered from burials, suggesting the movement of people (e.g. through marriage) during the period in question.

In addition to the many similarities, there are also a number of dissimilarities between the ceramics of the two cultures. Biconical handled jugs with cylindrical neck and handled mugs with elongated neck, hallmarks of the Somogyvár–Vinkovci ceramic inventory, are infrequent or downright lacking from the Makó–Kosihy–Čaka assemblages, and there is a much smaller variety of handled mugs, small amphora-like vessels and flasks. Pots rarely have folded out rims, a trait typical for the similar vessels of the Somogyvár culture. While wheel models and spindle whorls can be found among the small artefacts, their number is much lower than in Somogyvár assemblages. Animal figurines are entirely absent from the Makó–Kosihy–Čaka material and neither are there any striking resemblances between the human figurines. The ceramic inventory of the Somogyvár–Vinkovci culture does not comprise flat bowls with thickened rim or biconical bowls and mug-like vessels with low neck and crescentic rib decoration. The practice of roughening bowl exteriors is also infrequent.

A shared cultural substratum is the most general explanation cited for the similarities between the two cultures,<sup>999</sup> with the implication that the two cultures emerged roughly simultaneously.<sup>1000</sup> Kalicz argued that the many resemblances could be derived from a shared tradition and that the divergences could be explained by differing local antecedents.<sup>1001</sup> Bóna, Ecsedy, Bondár and Figler claimed that neither a genetic, nor an ethnic identity can be assumed between the two cultures.<sup>1002</sup> The currently available evidence indicates that the two cultures evolved at slightly different times and on a slightly different cultural substratum.

#### *Contact with the north and the north-west*

Connections between the Makó–Kosihy–Čaka and the Jevišovice B/Mödling–Zöbing culture are evidenced by the rim forms of pots and the use of interior decorated bowls.<sup>1003</sup>

Several studies have been devoted to the cultural contacts with the Moravian Corded Ware culture,<sup>1004</sup> and especially to the connections between south-eastern Moravia and the Carpathian Basin not only in relation to the Makó–Kosihy–Čaka culture, but also during the ensuing periods characterised by the Somogyvár–Vinkovci, Bell Beaker and early Nagyrév cultures.<sup>1005</sup> The contacts between the two regions can be divided into several phases. The primary direction of the contacts is not always clear: the new absolute chronological dates have in some cases challenged the traditional south to north trajectories, suggesting an exactly opposite one.<sup>1006</sup>

Contact with the various regional groups of the Corded Ware culture can, obviously, best be demonstrated in the Makó–Kosihy–Čaka assemblages from south-western Slovakia and the humble material from south-eastern Moravia. There has also been a welcome rise in analogous finds from the Budapest area and the northerly areas of the Great Hungarian Plain.

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<sup>999</sup> Kalicz (1984a) 98.

<sup>1000</sup> Ecsedy (1979a) 109; Bándi (1982).

<sup>1001</sup> Kalicz (1984a) 98.

<sup>1002</sup> Bóna (1972) 13; Ecsedy (1979a) 108; Figler (1994); Bondár (1995).

<sup>1003</sup> In her discussion of the cups from the Schwechat burial, Alexandra Krenn-Leeb suggested that they perhaps represent a late variant of the “Mörser” cups so popular in the Jevišovice culture: Krenn-Leeb (1999) 62, Abb. 7. F2.

<sup>1004</sup> Buchvaldek (1981a); Kalicz (1984a) 99.

<sup>1005</sup> Ondráček (1965); Buchvaldek (1981a); *idem* (1981b); Šebela (1981a); *idem* (1981b); *idem* (1999a); *idem* (1999b); Buchvaldek (2002).

<sup>1006</sup> For a recent discussion: Kalicz-Schreiber–Kalicz (1997); *idem* (1999).



Parallels to the vessels decorated with slender ribs, such as amphoras (Types XV/5–6) and mugs adorned with simple ribs and zig-zagging cordons (Types I/11, 14), can be quoted from the Moravian and Bohemian sites of the Corded Ware culture. Matching pieces to the biconical and rounded mugs with tall flaring neck of the Čaka burials (Types I/12b–c) can be quoted from both the Vinkovci culture and the Moravian Corded Ware culture. However, the geographic proximity of south-eastern Moravia suggests that despite the formal similarities, the parallels to this form be sought in that region rather than in the more distant Vinkovci culture. A Corded Ware connection has been proposed for the handled small pots of Type X/4. While there are no exact analogies to the vessel with asymmetrical handles (Type II/5) from the inhumation burial uncovered at Ivanka pri Nitre, it seems likely that a relationship can be assumed with the similar Corded Ware vessels.

The amphora-like vessel and the copper plaque from Šal'a (Type XV/4), as well as the rib ornamented amphora with rounded shoulder from the Somogyvár–Vinkovci tumulus burial at Rajka–Modrovich puszta (SV Type XV/1a)<sup>1007</sup> can be fitted into the same network of cultural contacts. There is no easy explanation for how amphoras of Type XIV/7, evidencing contacts with Moravia, reached sites such as Hódmezővásárhely–Gorzsa and Szarvas in southern Hungary.

#### *Contact with the east and the south-east*

There appears to have been little contact with the Glina III–Schneckenberg culture. At the same time, contacts were established with other Transylvanian groups, especially the Roşia group, most evidently reflected in the similarities in ceramic style.

Contact with the Nyírség group is evidenced by a few vessel types typical for the period (pots, two handled pots of Type XI/5) and the similar surface treatment of pots.<sup>1008</sup>

Parallel to the growing corpus of northern Balkanic and Vučedol metalwork, the significance earlier attributed to cultural impacts from Eastern Europe was challenged to some extent (e.g. the influence of Caucasian metallurgy transmitted through the steppe).<sup>1009</sup> However, Bátor's studies on the period's metal types, the assessment of the burials under the Sárrétudvari tumulus, the publication of a vessel with asymmetrical handles from the Dnieper region and the new systematic research of the prehistory of the steppe gave a fresh impetus to research on the period's cultural connections with the east.<sup>1010</sup>

#### *Contact with the Bell Beaker culture*

Advancing eastward from the Upper Danube Valley, the Makó–Kosihy–Čaka groups in the Vienna Basin were eventually ousted by the Bell Beaker culture. The handled jugs so frequent in the Budapest area were deposited much more rarely in the inhumation burials,<sup>1011</sup> and neither is the role of the Makó–Kosihy–Čaka culture evident in the region's cultural transformation (a few cremation burials are perhaps the single reflections in the archaeological record). The late Makó–Kosihy–Čaka burial from Schwechat–Braueri can be dated to the onset of the Early Bronze Age 2 which saw the arrival of Bell Beaker groups north of the Danube.

<sup>1007</sup> Figler (1994) Abb. 9. 1.

<sup>1008</sup> Dani (1999) 59, Pl. 30. 4, Pl. 32. 2, Pl. 35. 2, Pl. 37. 1.

<sup>1009</sup> Kalicz (1968) 92–96, 105–109; Machnik (1973a); *idem* (1973b); *idem* (1973c); *idem* (1975); *idem* (1987); *idem* (1991a); *idem* (1991b).

<sup>1010</sup> Bátor (2002); *idem* (2003); Kaiser (2003); Dani–M. Nepper (2006); Rassamakin–Nikolova (2008).

<sup>1011</sup> Neugebauer-Maresch (1994a) 35–48; *idem* (1994b).

The Bell Beaker–Csepel group settling the Budapest area<sup>1012</sup> soon established contact with the local Makó–Kosihy–Čaka population as shown by the resemblances between the household pottery types and the surface treatment of vessels, as well as by the changes in the decoration of interior decorated footed bowls, now adorned in the Bell Beaker style.<sup>1013</sup> Another good example for the blend between stylistic traits is the decorated jug with asymmetrical handles from Szigetszentmiklós–Üdülősor.<sup>1014</sup> In contrast to the other groups, the Bell Beaker groups settling in the Budapest area also practiced cremation in addition to inhumation, possibly reflecting the direct influence of the local Makó–Kosihy–Čaka population.<sup>1015</sup> The evaluation of the recently excavated settlements and cemeteries in the Budapest area will undoubtedly enrich our knowledge of this period.

The easternmost point of the Bell Beaker distribution was for a long time marked by a pit excavated on the outskirts of Veresegyháza.<sup>1016</sup> It is indeed possible that similarly to what has been observed on early Nagyrév settlements, elements of the Bell Beaker culture appeared on this late Makó–Kosihy–Čaka settlement dating from the Early Bronze Age 2.<sup>1017</sup> However, the finds do not support an interpretation along these lines.

<sup>1012</sup> Bell Beaker–Csepel group: *Kalicz-Schreiber* (1975a) 287–289; *idem* (1975b); *Kalicz-Schreiber-Kalicz* (1997) 336; *idem* (1999) 86. See also *Ecsedy* (1988) 16–17; *Endrődi* (1992) 100. Bóna called this group the Bell Beaker–Budapest group. He labelled the late phase of the group, characterised by the adoption of the cremation rite and the gradual decline of beakers proper, the Budakalász group: *Bóna* (1992a) 12.

<sup>1013</sup> Tököl: *Kalicz-Schreiber* (1984b) Taf. XXXIV. 5, 6.

<sup>1014</sup> *Endrődi* (1992) Fig. 15.

<sup>1015</sup> Bóna believed that the Bell Beaker groups may have become familiar with and adopted the practice of cremating the dead from the late Makó population of the Vienna Basin: *Bóna* (1992a) 12. It yet remains to be determined how soon or how long after their arrival to the Vienna Basin the Bell Beaker groups advancing along the Danube reached Budapest: *Kalicz-Kalicz-Schreiber* (1999) 88.

<sup>1016</sup> Veresegyház–Ivacsok: MRT 9, 549, Site 37/2. Cp. *Bóna* (1992a) 16; *Kalicz-Kalicz-Schreiber* (1999) Fig. 3.

<sup>1017</sup> Mezőkomárom: *Kalicz-Schreiber* (1976b) Abb. 2. 17, Abb. 3. 5; Dunaföldvár–Kálvária: *Szabó* (1992) Pl. XIX. 2, Pl. XXXVIII. 5, 8.



## CATALOGUE I

### SITES OF THE MAKÓ–KOSIHY–ČAKA CULTURE

(Figs 1–6)

Hungary (cat. nos 1–305)

Slovakia (cat. nos 306–378)

Austria (cat. nos 379–398)

Czech Republic (Moravia) (cat. nos 399–410)

Romania (cat. nos 411–425)

Serbia (cat. nos 426–428)

The asterisk (\*) indicates sites where interior decorated bowls have been found.

#### Hungary

**1. Abda–Hármasok** (County Győr-Moson-Sopron)

Settlement.

Salvage excavation (András Figler, 1992–1993).

Timber-framed house (5 m x 15 m, N–S) and several smaller pits.

*Figler* (1994) 25, Fo. 13; *idem* (1996a) 9–10, 15, 17, Figs 1–2, Pl. I. 2–7, Pl. II; *Bartosiewicz* (1996).

**2. Abony–33 Alkotás Street** (County Pest)

Burial (?)

Small-scale rescue excavation (István Dinnyés, 1979).

Animal bones in a decorated vessel from the Early Bronze Age. CKM inv. no. 86.111.1. Unpublished.

*Bondár* (2007) 90.

**3. Abony–Kisbalaton-dűlő** (County Pest)

Settlement.

Salvage excavation (5335 m<sup>2</sup>, Zoltán Polgár, 2003).

Partially excavated pit.

*Polgár* (2004b) 149; *idem* (2006) 92.

**4. Albertirsa** (County Pest)

Stray find. HNM inv. no. 84/1952. Unpublished.

*Kalicz* (1968) 78, Fo. 25.

**5. Apostag** (County Bács-Kiskun)

Settlement.

Unpublished.

*Somogyvári* (2007).

**6. Bag–Peres-dűlő** (County Pest)

Settlement.

Small-scale excavation (Nándor Kalicz, 1961).

Partially excavated pit.

*Kalicz* (1968) 79, Fo. 28, Taf. IX. 1–17.

**7. Baja–Szlatina** (County Bács-Kiskun)

Settlement.

“Zók-like” finds mentioned by Mihály Köhegyi (1977). Unpublished.

*Köhegyi* (1978); *H. Tóth* (1990) Site 7.

**\*8. Bajna–Kovácsi-hegy-alja** (County Komárom-Esztergom)

Settlement.

Field survey (1969).

- Body fragment of an interior decorated bowl.  
MRT 5, 37, Site 1/19.
- \*9. Bajna-Öreglyuk** (County Komárom-Esztergom)  
Settlement (cave).  
Excavation (Jenő Hillebrand, 1916; Ottokár Kadić, 1918).  
Fragment of an interior decorated bowl with cross shaped foot. HNM inv. no. 40/944.1–4. Unpublished.  
MRT 5, 37, Site 1/12.
- \*10. Bajna-TSz major** (County Komárom-Esztergom)  
Settlement.  
Field survey (1971).  
Fragments of interior decorated footed bowls, bowls, handled jugs and fragments of pots with brushed decoration from a partially excavated pit.  
Interior decorated bowl with short, solid foot (MRT 5, 42–43, Site 1/47, Pl. 9. 8).  
MRT 5, 42–43, Site 1/47, Pl. 9. 6, 8–9, 11–13.
- 11. Bajót-Péliföldszentkereszt VIII (Szerűsföldek)** (County Komárom-Esztergom)  
Stray find.  
Excavation (Albin Balogh, 1925).  
Handled jug of the Makó-Kosihy-Čaka culture; clay wheel model from the Early Bronze Age. EBM inv. no. 55.592.1.  
*Patay* (1938) 72; MRT 5, 48, Site 2/12, Pl. 9. 10.
- 12. Balatonkenese-7 Kapuvári Street** (County Veszprém)  
Settlement.  
Small-scale rescue excavation during the laying of a gas pipeline (1987).  
Beehive shaped pit (Diam. 125 cm, D. 110 cm).  
MRT 2, 50, Site 8/5, Pl. 6. 4, 12, 14, 17 (Balatonkenese-Sirály KTSZ raktára); *Patay* (2002).
- \*13. Ballószög (M5 Motorway, Site 91)** (County Bács-Kiskun)  
Settlement.  
Salvage excavation (Attila Horváth, 1994).  
Several refuse pits: Feature 216 dated to the Late Copper Age/Early Bronze Age; fragment of an interior decorated bowl from a pit (Feature 197). The exact date of the settlement and the inhumation and cremation burials was not specified.  
*Horváth* (1995a) 187; *idem* (1995b) 176–177.
- \*14. Bátmonostor-Szurdok part** (County Bács-Kiskun)  
Stray find.  
Fragment of the lower part of an interior decorated bowl with round, hollow foot.  
*Banner* (1942) 146, Abb. 2.
- 15. Battonya-Aradi Road I** (County Békés)  
Settlement.  
Small-scale rescue excavation (György Goldman, Júlia G. Szénászký, 1984–1985).  
Two pits lying 250 m apart.  
*G. Szénászký* (1987–88) 141, 143, 146, Pls 5–7, Pl. 8. 3, 5.
- 16. Battonya-Fővezeték II** (County Békés)  
Settlement.  
Small-scale rescue excavation (György Goldman, Júlia G. Szénászký, 1984–1985).  
Two pits lying 53 m apart.  
*G. Szénászký* (1987–88) 146, Pl. 4.
- \*17. Battonya-Georgievics-tanya** (County Békés)  
Settlement.  
Small-scale rescue excavation (János József Szabó, 1978–1979).  
Pit and various unstratified finds.  
Unstratified find of the foot fragment of an interior decorated bowl with cross shaped foot.  
*Szabó* (1979a); *Bondár-Szabó-D. Matuz* (1998) 16–17, Pls 14–19.



- 18. Battonya–Gödrösök** (County Békés)  
 Unstratified find.  
 Details not specified.  
*Kürti* (1974) 45; *G. Szénásky* (1987–88) 154, Pl. 1.
- 19. Battonya–MOM Forgácsoló** (County Békés)  
 Settlement.  
 Pits disturbed during construction work (János József Szabó, 1978). Unpublished.  
*Szabó* (1979b).<sup>1018</sup>
- \*20. Battonya–Vörös Október TSZ homokbányája** [Sand pit of the Vörös Október Co-operative] (County Békés)  
 Settlement.  
 Excavation (János József Szabó, 1977).  
 Two pits and various unstratified finds.  
 Body fragment of a jug decorated in the stab-and-drag style (*Pl. I. 6*), rim fragments decorated in the stab-and-drag style and basal fragments of interior decorated bowls (*Pl. I. 4–5*) were found next to a two-handled pot (*Pl. I. 7*). BMM inv. no. 80.43.13–15.<sup>1019</sup>  
*Szabó* (1978a).
- \*21. Berettyóújfalu–Nagy-Bócs-dűlő** (County Hajdú-Bihar)  
 Settlement and burials.  
 Salvage excavation (69,273.6 m<sup>2</sup>, János Dani and others, 2004–2005).  
 55 features: pits, sacrificial deposits (with interior decorated bowls), wells; four scattered cremation burials (Features 568/1316, 686/1597, 824/1889, 1922/4055).  
*Dani et al.* (2006).
- \*22. Békés–Déló, Szabó-tanya** (County Békés)  
 Settlement.  
 Field survey (1987).  
 Alongside other finds, an interior decorated bowl fragment and several brushed body fragments were found.  
 MRT 10, 71, Site 1/52.
- \*23. Békés–Déló, Csatornapart** (County Békés)  
 Settlement.  
 Field survey (1987).  
 Alongside other finds, an interior decorated bowl fragment and several brushed body fragments were found.  
 MRT 10, 71, Site 1/55.
- 24. Békés–Hosszú sziget** (County Békés)  
 Settlement.  
 Field survey (1988).  
 A few body fragments with brushed surface.  
 MRT 10, 112, Site 1/171.
- 25. Békés–Maksári tanyák I** (County Békés)  
 Settlement.  
 Field survey (1988).  
 Alongside other finds, a small knob and body fragments with brushed surface were found.  
 MRT 10, 114–115, Site 1/175.
- 26. Békés–Maksári tanyák II** (County Békés)  
 Settlement.  
 Field survey (1988).  
 Body fragments with brushed surface.  
 MRT 10, 115, Site 1/176.

<sup>1018</sup> I am indebted to János József Szabó for his kind personal communication on the finds.

<sup>1019</sup> I would here like to thank János József Szabó for kindly allowing me to publish the finds.

- 27. Békés–Maksári tanyák III** (County Békés)  
 Settlement.  
 Field survey (1988).  
 Body fragments with brushed surface.  
 MRT 10, 115, Site 1/177.
- 28. Békés–Lápos dombi gátórház** (County Békés)  
 Settlement.  
 Field survey (1989).  
 Body fragments with brushed surface.  
 MRT 10, 121, Site 1/202.
- 29. Békéscsaba–Alvégi-legelő, majorok** (County Békés)  
 Cremation burial.  
 Small-scale rescue excavation (János József Szabó, 1973).  
 The grave goods were a jug (H. 15 cm) and a bowl (H. 10 cm) (*Pl. I. 2–3*).  
*Nikolin* (1991) 73–75, Fig. 2; *Bóna* (1992a) 15; MRT 10, 211–212, Site 2/189, Fig. 41.
- \*30. Békéscsaba–Nagyrét, Gerlai sarok** (County Békés)  
 Settlement.  
 Field survey (1986).  
 Body fragment of an exterior and interior decorated bowl.  
 MRT 10, 255, Site 2/306, Pl. 15. 1.
- \*31. Békésszentandrás–Pitye-gát** (County Békés)  
 Settlement.  
 Field survey (1974, 1979).  
 Body fragment of an interior decorated bowl with a design of hatched lozenges.  
 MRT 8, 69, Site 1/19, Pl. 20. 5.
- \*32. Bélmegyer–Fehér hát, Metykó-tanya** (County Békés)  
 Settlement.  
 Field survey (1989).  
 Small body fragment of an interior decorated bowl with deeply excised design.  
 MRT 10, 367, Site 3/92, Pl. 15. 3 (initially assigned to the Nyírség culture).
- 33. Bélmegyer–József Attila Street, Vadász-tanya** (County Békés)  
 Settlement.  
 Field survey (1986).  
 Roughly brushed body fragments, rim and handle fragments.  
 MRT 10, 332–333, Site 3/12.
- 34. Bélmegyer–Kárász-megyer, Jónás-tanya** (County Békés)  
 Settlement.  
 Field survey (1987).  
 A few roughly brushed body fragments.  
 MRT 10, 333, Site 3/13.
- 35. Bélmegyer–Kárász-megyer, Gut-tanya** (County Békés)  
 Settlement.  
 Field survey (1987).  
 A few roughly brushed body fragments.  
 MRT 10, 333, Site 3/14.
- 36. Biatorbágy–Bolha-hegy** (County Pest)  
 Settlement.  
 Field survey (1975, 1978).  
 Body fragment decorated with brushing/scoring and finger impressed ribs, rim fragments.  
 MRT 7, 33, Site 1/24.
- 37. Biatorbágy–Budapark** (County Pest)  
 Settlement.  
 Salvage excavation (Éva Csongrádiné Balogh, László Simon, 1991).  
 26 settlement features without any closer details.  
*Simon* (1993) 141; *Bondár* (2007) 90.



**38. Biatorbágy–Hosszúrétek-dűlő** (County Pest)

Settlement.

Salvage excavation (Anna Endrődi, Éva Vadász, 1991; László András Horváth, László Reményi, Anikó Tóth, 2003).

Various settlement features scattered over a larger area (1991); a few cylindrical refuse pits scattered over a large area (2003).

*Horváth–Reményi–Tóth* (2004) 27–28, Pl. 6. 13; *Reményi–Tóth* (2004); *Bondár* (2007) 90.

**39. Biatorbágy–Köves-dűlő** (County Pest)

Settlement.

Field survey (1975).

Body fragment of an Early Bronze Age pot with brushed decoration, bowl and pot rim fragments.

MRT 7, 34, Site 1/27.

**\*40. Biatorbágy–Öreg-hegy** (County Pest)

Settlement.

Field survey (1974, 1976).

Rim fragment of an interior and rim decorated bowl. Since lost.

*Stein* (1936) 343, 345, Pl. 1. 2, Pl. 2. 6; *Kalicz* (1968) 79, Fo. 45; MRT 7, 30, Site 1/3.

**\*41. Biatorbágy–Szarvasugrás** (County Pest)

Settlement.

Field survey (1975–1976) and salvage excavation (Tamás Repiszky, 2005).

A total of 293 features, with the proportion of Makó–Kosihy–Čaka and Vatya features not specified. The number of finds was relatively low.

Fragment of an interior decorated bowl with round, hollow foot (MRT 7).

MRT 7, 332, Site 34/10 (Torbágy–Szarvasugrás); *Repiszky* (2006).

**\*42. Biatorbágy–Tyúkberek and Törökbálint–Kukoricadűlő** (County Pest)

Settlement and symbolic burial (?).

Field survey (1972); salvage excavation (László András Horváth, László Reményi, Anikó Tóth, 2003).

Site located a few hundred meters from the Biatorbágy–Hosszúrétek settlement (cat. no. 38).

Burial (?) with a bowl and a pot, but no human ashes (2003).

Fragment of an interior decorated bowl and the low hollow foot of an interior decorated bowl (MRT 7).

MRT 7, 332, Site 34/6; *Horváth–Reményi–Tóth* (2004) 34–35, Pl. 11. 2.

**43. Bicske–Szőlőhegy** (County Fejér)

Inurned burial (?)

Uncertain find circumstances.

Burnt human bones/ashes in an amphora. H. 36 cm. HNM inv. no. 98/1864.1.

*Kalicz* (1968) 79, Fo. 44, Taf. X. 8.

**\*44. Boldog–Vasútállomás** [Railway station] (County Heves)

Settlement.

Field survey (Nándor Kalicz, 1971).

Brushed body fragments, interior decorated bowl, bowl and pot fragments from one or two partially excavated pits.

Five rim fragments of interior decorated bowls and a fragment of a low foot-ring (*Kalicz* [1998a] 13, Fig. 13. 2–5, 7).

*Kalicz* (1998a) 5, 13–14, Figs 13–16.

**45. Budakeszi–Kert Street–Hársfa Street** (County Pest)

Settlement.

Field survey (1976).

Body fragments with brushed surface, bowl and pot rim fragments from the Early Bronze Age.

MRT 7, 60, Site 4/14.

**46. Budakeszi–Szőlőskert, Tangazdaság** (County Pest)

Settlement.

Field survey (1976) and small-scale rescue excavation (András Czene, 2006).

Two houses (6 m x 4 m) and round ovens were uncovered.

MRT 7, 58, Site 4/8, *Czene–Ottományi* (2007).

**47. Budapest, I–Tabán**

Stray finds.

Nándor Kalicz quoted a vessel fragment from an earlier excavation and assigned it to the Makó–Kosihy–Čaka culture. Unpublished.

*Kalicz* (1968) 79, Fo. 41.

**48. Budapest, II–Dózsa György Street**

Settlement.

Small-scale rescue excavation (Frigyes Köszegi).

Unpublished.

*Schreiber* (1972) 152; *Kalicz-Schreiber* (1994) Abb. 14.

**\*49. Budapest, III–Aranyhegyi Road, Mocsáros**

Settlement and burial.

Rescue excavations (Rózsa Kalicz-Schreiber, 1962, 1986–1988).

Six pits (K/14, I/3, I/19, II/5, II/6, 6a, II/7) and a scattered cremation burial with 12–13 vessels lying farther from the pits.

Interior decorated bowls:

Burial: an interior decorated bowl with round, hollow foot. H. ca. 8 cm (*Kalicz-Schreiber* [1994] 40, Abb. 2a–b).

Settlement (Pits K/14, II/5): bowl fragments (*Kalicz-Schreiber* [1994] 41, Abb. 4. 1a–b, Abb. 9. 9).

Unstratified finds: body fragment and fragment of a rectangular, hollow foot (*Schreiber* [1972] 152, Pl. 1. 5; *Kalicz-Schreiber* [1994] Abb. 11. 5a–b, 10a–b).

*Kalicz* (1968) 79, Fo. 40; *Schreiber* (1972) 152, Pl. 1. 3, 5–7; *Kalicz-Schreiber* (1994).

**50. Budapest, III–Békásmegyer**

Settlement.

Excavation (Ferenc Tompa, 1932–1936).

Details not specified.

*Schreiber* (1972) 152; *Kalicz-Schreiber* (1994) Abb. 14.

**\*51. Budapest, III–Békásmegyer (BUVÁTI Vízisporttelepe) [BUVÁTI water sports centre]**

Settlement.

Excavation (Vera G. Csánk, 1962).

Of the 26 excavated features dating from various periods, two pits (14, 15) and other unstratified finds were assigned to the Makó–Kosihy–Čaka culture.

Only the rim fragment of an interior decorated bowl with carelessly executed decoration has been published.

*G. Csánk* (1964) 211, Fig. 11. 4; *Schreiber* (1972) 152, Fig. 1. 4; *Kalicz-Schreiber* (1994) Abb. 14.

**52. Budapest, III–293 Királyok Road**

Settlement.

Rescue excavation (Gábor Szilas, 2007–2008).

Pits.

*Szilas* (2008) 190.

**53. Budapest, XI–Budaörsi Repülőtér [Budaörs Airfield]**

Settlement and burial (?)

Small-scale rescue excavation.

The only published finds are a fragment of an anthropomorphic vessel with long neck (perhaps a grave good), an amphora, a larger and a smaller pot, a bowl and a small conical bowl.

*Schreiber* (1972) 152, Fig. 1. 2, 8–12; *idem* (1984a) Fig. 1. 3–4, 7–8, 10; *Kalicz-Schreiber* (1994) Abb. 14.

**\*54. Budapest, XI–Kőérberek, Tóváros**

Settlement.

Salvage excavation (approximately 220,000 m<sup>2</sup>, György Terei and others, 2003–2005).

Approximately 150 Early Bronze Age 1–3 features of the Makó–Kosihy–Čaka and early Nagyrév cultures: pits and sacrificial pits (one yielding a figurine).

Unpublished interior decorated bowl.

*Terei* (2005) 37; *Terei et al.* (2005) 196; *Horváth et al.* (2005) 147–150; *Zsidi* (2005) 84; *Horváth–Horváth M.–Terei* (2006); *Reményi* (in press).



**55. Budapest, XI–Vasvári-laktanya [Vasvári Barracks]**

Settlement.

Small-scale rescue excavation (Margit Nagy, Schreiber Rózsa, 1977).

Unstratified finds of the Makó–Kosihy–Čaka and Vatia cultures and an inhumation burial from the Early Bronze Age. Unpublished.

*Nagy–Schreiber* (1978); *Kalicz–Schreiber* (1994) Abb. 14.

**56. Budapest, XIV–Péceli Road**

Settlement.

Unpublished.

*Kalicz–Schreiber* (1994) Abb. 14.

**57. Budapest, XIV–Szentmihályi Road**

Inhumation burial.

Vessel with asymmetrical handles found in an inhumation grave with a contracted burial.

*Tompa* (1945) 15, Fig. 1. 6; *Kalicz* (1968) 80, Fo. 71, Taf. III. 3; *Schreiber* (1972) 152, Fig. 1. 4; *Kalicz–Schreiber* (1976a) Abb. 5; *Kalicz–Schreiber* (1994) Abb. 14.

**\*58. Budapest, XVII–Rákoscsaba, Péceli Road**

Settlement and a cremation burial.

Salvage excavation in the eastern sector of the M0 Motorway (28,100 m<sup>2</sup>, Anita Korom, 2005–2006).

Forty Makó–Kosihy–Čaka features scattered over the southern part of the area. Eleven vessels from the cremation burial: two interior decorated bowls, jugs and other bowls.

*Korom* (2006) 209–210; *idem* (2007); *Zsidi–Reményi* (2007) 8.

**59. Budapest, XVII–Rákoskeresztúr**

Stray finds.

Unpublished finds quoted from the collection of the HNM.

*Schreiber* (1972) 152; *Kalicz–Schreiber* (1994) Abb. 14.

**60. Budapest, XXII–Kamaraerdő**

Settlement.

Excavation (Melinda Kaba, Tibor Nagy, 1954–1955).

Pit. BHM inv. no. 56.1.1–56.7.12. Unpublished.

*Kalicz* (1968) 79, Fo. 42.

**61. Cegléd–Bába-Molnár, Hartyáni-dűlő (Site 4/4) (County Pest)**

Settlement.

Salvage excavation (5306 m<sup>2</sup>, István Dinnyés, Róbert Kalácska, 2003–2004).

A few Makó–Kosihy–Čaka features. Feature 42 on the western part of the site was interpreted as a rectangular house (?) with rounded corners.

*Kalácska* (2004) 193–194; *Kalácska–Dinnyés* (2006) 84.

**\*62. Cegléd–Intézeti and Bába-Molnár-dűlő (Site 4/12) (County Pest)**

Settlement.

Salvage excavation (14,000 m<sup>2</sup>, András Rajna, 2005).

Several Early Bronze Age pits, of which Pits 114 and 130 can be assigned to the Makó–Kosihy–Čaka culture.

Fragments of an interior decorated bowl (Pit 114).

*Rajna* (2006a); *idem* (2006b) 103–104.

**\*63. Cegléd–Bürgeházi-dűlő (Site 4/14) (County Pest)**

Settlement.

Salvage excavation (46,083 m<sup>2</sup>, Gyöngyi Gulyás, 2005–2006).

54 Bronze Age (Makó–Kosihy–Čaka and Vatia culture) and 41 other Bronze Age features forming smaller clusters on the site.

Fragments of an interior decorated bowl.

*Gulyás* (2006a); *idem* (2006b) 105–106.

**\*64. Cegléd–Réti-dűlő (929. sz.-tanya) (County Pest)**

Stray find.

Exterior, interior and rim decorated bowl fragment. CKM inv. no. 62.2.7.Ö.

*Párducz* (1967) 103; *Dinnyés* (1982) 49, Pl. III. 1.

**\*65. Csanytelek–Rétoldal (Palé) (County Csongrád)**

Settlement.

Excavation (Ottó Trogmayer, Gábor Lőrinczy, 1988–1990); field survey (Klára P. Fischl, 1993).

Makó–Kosihiy–Čaka settlement features in the area of the Middle Bronze Age cemetery.

A rim fragment of an exterior, interior and rim decorated bowl was found in the vicinity of the site during the field survey (*Fig. 30. 7*).<sup>1020</sup>

*Fischl* (1994) 17, Site 9, Pl. I.

**66. Csárdaszállás–Félhalom (County Békés)**

Field survey (1975, 1988–1989).

The surface finds from the kurgan included the rim fragment of a bowl decorated with a crescentic rib and a body fragment with brushed decoration of the Makó–Kosihiy–Čaka culture.

MRT 10, 376–378, Site 4/10, Pl. 15. 5–6.

**67. Csengele–Fecskés (County Csongrád)**

Settlement.

Salvage excavation (9574 m<sup>2</sup>, Csilla Balogh, Attila Türk, 2003).

70 features, including wells.

*Balogh–Türk* (2004) 199.

**68. Csolnok–Annayölgyi Road (County Komárom-Esztergom)**

Settlement.

Field survey (1971).

Body and rim fragments of pots.

MRT 5, 55, Site 3/10.

**69. Csolnok–Hinter den Gärten (County Komárom-Esztergom)**

Settlement.

Field survey (1965).

Pot and bowl fragments.

MRT 5, 53, Site 3/1.

**70. Csolnok–Szedres (County Komárom-Esztergom)**

Settlement.

Field survey (1970).

Rim fragments of pots and fragments with brushed decoration.

MRT 5, 53, Site 3/2.

**\*71. Csongrád–Saroktanya (County Csongrád)**

Settlement.

Excavation (450 m<sup>2</sup>, Gyula Gazdapusztai, 1958).

12 pits below a settlement of the Vatya culture.

Rim fragments of interior decorated bowls with chequerboard decoration (Pits 2, 5: *Gazdapusztai* [1966] 241–248, Taf. 7. 1–3, 11).

*Gazdapusztai* (1966); *Kalicz* (1968) 78, Fo. 22.

**\*72. Csongrád–Sertéstelep (County Csongrád)**

Settlement.

Rescue excavation (1200 m<sup>2</sup>, Katalin Tóth, 1998).

9 pits in two smaller clusters (one pit interpreted as a well, another one containing a child skeleton).

Three small rim and body fragments of interior decorated bowls (*Tóth* [2001b] Fig. 7. 5, Fig. 11. 1, Fig. 15. 1).

*Tóth* (2001a); *idem* (2001b).

**73. Csongrád–Vidresziget (County Csongrád)**

Settlement.

Excavation (György Goldman, Júlia G. Szénászkzy).

A timber-framed building (37 m x 7 m) was unearthed. A few other Makó–Kosihiy–Čaka settlement features were also identified at the site. Rózsa Schreiber-Kalicz published a pot-like vessel with asymmetrical handles. The finds are still unpublished.

<sup>1020</sup> I would here like to thank Klára P. Fischl for kindly allowing me to publish the finds.



- G. Szénászký* (1987–88) 152, 154; *Kalicz* (1984a) 95, Taf. XXIII. 1; *Kalicz-Schreiber* (1991) 12, Fig. 14. 7; *V. Szabó* (1999) 53, Fig. 1. 3.
- \*74. Csólyospálos–Felsőpálos, Budai-tanya** (County Bács-Kiskun)  
 Stray finds.  
 Fragment of an interior decorated footed bowl and some rusticated body fragments.  
*Tóth* (1998a) 60.
- 75. Dág–Kiscsévpuszta I** (County Komárom-Esztergom)  
 Settlement.  
 Field survey (1965).  
 Thickened rim fragment, a body fragment with a knob and brushed decoration.  
 MRT 5, 56, Site 4/1.
- \*76. Debrecen–Bellegelő** (County Hajdú-Bihar)  
 Stray find.  
 1. Flask shaped vessel. H. ca. 7 cm. DDM inv. no. 88/1934.  
 2. Interior decorated bowl with cross shaped hollow foot. H. ca. 7 cm. DDM inv. no. IV.1934.87.1.  
*Kalicz* (1968) 64, 75–76, Fo. 13, Taf. XII. 4, 7a–c.
- 77. Debrecen–Bellegelő–Józsa** (County Hajdú-Bihar)  
 Stray find.  
 Handled mug. H. 8.5 cm.  
*Kalicz* (1968) Taf. XII. 6.
- 78. Debrecen–Köntöskert, 22 Bezerédj Street** (County Hajdú-Bihar)  
 Stray find.  
 Flask shaped vessel (H. 19.5 cm), probably a grave good.  
*Patay* (1940) 4; *Kalicz* (1968) 64, 75, Fo. 15; *Németi–Dani* (2001) 109, Fig. 8. 4.  
**a. Debrecen–Köntöskert, 30 Bezerédj Street**  
 Inurned burial.  
 Rescue excavation (János Dani, 1999).  
 Burial of an 18–25 years old woman; the grave contained three vessels.  
*Németi–Dani* (2001) 103–110, Fig. 8. 1–3, Fig. 9.
- \*79. Debrecen–Szövetkezeti szőlőtelep** (County Hajdú-Bihar)  
 Stray find.  
 Interior decorated bowl with low, solid cross shaped foot. H. ca. 4.2 cm. DDM inv. no. IV.186/1913.  
*Patay* (1940) 4; *Kalicz* (1968) 64, 75, Fo. 12, Taf. XII. 1a–b.
- 80. Debrecen–Városi téglagyár** [Municipal brickyard] (County Hajdú-Bihar)  
 Settlement.  
 Unprofessional excavation (1931). The site lies 1500–1600 m north-west from the burials at Debrecen–Bezerédj Street.  
 Partially excavated pit.  
*Németi–Dani* (2001) 109, Figs 10–11.
- 81. Dévaványa–Tókert** (County Békés)  
 Stray finds.  
 Possibly vessel fragments of the Makó–Kosihy–Čaka culture.  
 MRT 6, 50–51, Site 3/66.
- \*82. Doboz–Falu helyi erdőszház** (County Békés)  
 Settlement.  
 Excavation (Júlia Kovalovszki, 1979).  
 Fragments of interior decorated bowls, mugs and animal bones from a pit. Unpublished.  
*Kovalovszki* (1980); *idem* (1989) 120.
- \*83. Domony–Roob János kertje** [J. Roob's garden] (County Pest)  
 Settlement.  
 Excavation (Nándor Kalicz, 1960).  
 Two larger pits (B1, B2: Diam. 280 cm and 260 cm, D. 110 cm and 190 cm).  
 Rim and body fragments of interior decorated bowls; round and rectangular hollow foot fragments (*Kalicz* [1968] Taf. IV. 3–4, Taf. VI. 4–6, 9, 32–33).  
*Kalicz* (1968) 78–79, Fo. 27, Taf. IV, Taf. V. 6, 10–13, Taf. VI–VIII, Taf. X. 1.

- 84. Drágszél–hilltop northward from the cemetery** (County Bács-Kiskun)  
 Stray finds.  
 Body fragments of vessels with rusticated surface.  
 Tóth (1999) Fig. 1. 1–6.
- \*85. Dunapataj–Parlag** (County Bács-Kiskun)  
 Settlement.  
 Field survey (1967).  
 Fragments of Nagyrév vessels and culturally uncertain Early Bronze Age 1 finds such as interior decorated bowl fragments. Unpublished.  
 H. Tóth (1990) Site 20; Gallina (1996) 14; Tóth (1998a) 57, Note 9.
- \*86. Dunaszentpál–Bolgányi úti kavicsbánya** [Bolgányi Road gravel pit] (County Győr-Moson-Sopron)  
 Stray find.  
 The find was collected by archaeologists working in the Museum of Győr in the 1960s.  
 Intact interior decorated bowl with hollow foot. H. 8 cm, dR. 19 cm, dB. 7.5 cm.  
 Figler (1994) 24, Fo. 9; *idem* (1996a) 9, 15, Pl. I. 1.
- 87. Dusnok–Várad** (County Bács-Kiskun)  
 Settlement.  
 Field survey.  
 Rim fragment of a bowl and body fragments of pots with rusticated surface.  
 Tóth (1999) Fig. 2. 3; Somogyvári (2007) 16.
- 88. Ecseg–Várhegy** (County Nógrád)  
 Settlement.  
 Details not specified.  
 Bóna (1992a) 11.
- 89. Eger–Szarvaskő** (County Heves)  
 Stray find.  
 Handled mug. H. ca. 9.5 cm (Fig. 19. 10).  
 Nándor Kalicz's kind personal communication. Archives of HAS AI inv. no. 17.757.  
**Elep 25, see 187. Nagyhegyes–Elep**
- \*90. Endrőd–Bogárzó** (County Békés)  
 Settlement.  
 Field survey (1979).  
 Body fragments with brushed decoration and body fragment of an interior decorated bowl.  
 MRT 8, 177–178, Site 3/174, Pl. 20. 3.
- \*91. Endrőd–Kocsorhegy** (County Békés)  
 Settlement.  
 Field survey (1973).  
 Fragment of a small mug and rim fragment of an interior decorated bowl.  
 MRT 8, 129–132, Site 3/7, Pl. 20. 1–2.
- \*92. Endrőd–Öregszőlők IV** (County Békés)  
 Settlement.  
 Field survey (1976).  
 Pottery fragments: rim fragments of bowls, fragment of a jug with cylindrical neck and body fragments of pots with brushed decoration. Fragment of an interior decorated bowl.  
 MRT 8, 142–143, Site 3/37.
- 93. Endrőd–Paraj-hegyi-dűlő** (County Békés)  
 Stray find.  
 Field survey (1974–1975). The site is close to the Endrőd–Öregszőlők site.  
 Broken mould for a shaft-hole axe.  
 MRT 8, 147–148, Site 3/44, Pl. 19. 5.
- \*94. Endrőd–Rihes-halom** (County Békés)  
 Stray find (1976).  
 The finds included the rim fragment of an interior decorated bowl with a zig-zag pattern in its interior.  
 MRT 8, 169, Site 3/132, Pl. 20. 4.



- 95. Endrőd–Site 161, Décsi Páskum (Gyomaendrőd) (County Békés)**  
 Settlement.  
 Excavation (700 m<sup>2</sup>, Dénes Jankovich B., 1991).  
 Pit (Pit 6) and various unstratified finds.  
 MRT 8, 175, Site 3/161; *Bondár* (1999) 49–52, Fig. 3. 6–8, 10–11, Figs 4–10.
- 96. Esztergom–Duna-dűlő III (County Komárom-Esztergom)**  
 Settlement.  
 Field survey (1969).  
 Body fragments of pots with brushed decoration were found in the soil of the collapsed bank of the Danube.  
 MRT 5, 212, Site 8/79.
- \*97. Esztergom–Unknown site (County Komárom-Esztergom)**  
 Stray find.  
 Rim fragment of an interior decorated bowl.  
 EBM inv. no. 55.182.1.
- 98. Esztergom–Kistói-földek (County Komárom-Esztergom)**  
 Settlement.  
 Field survey (1969).  
 Body fragments with brushed decoration.  
 MRT 5, 211–212, Site 8/78.
- \*99. Esztergom–Kovácsi (County Komárom-Esztergom)**  
 Settlement.  
 Excavation and stray finds (1954–1955).  
 Fragment of an interior decorated bowl with cross shaped foot.  
 MRT 5, 175, Site 8/17, Pl. 9. 7.
- \*100. Esztergom–Szentkirály I (County Komárom-Esztergom)**  
 Stray finds.  
 An urn from the Early Bronze Age, a mug decorated with incised lines and an undecorated handled mug.  
 An unprovenanced small handled mug in the Balassa Bálint Museum (Esztergom) probably originates from this site. The finds were assigned to the Somogyvár–Vinkovci culture.  
 Interior decorated bowl with hollow foot (1926).  
*Bóna* (1965a) 41, Pl. XII. 8–9; MRT 5, 183, Site 8/20, Pl. 9. 1, 14; *Bondár* (1995) 251.
- \*101. Esztergom–Szentgyörgymező–Dunapart (County Komárom-Esztergom)**  
 Settlement.  
 Stray find (1938). Excavation (Sarolta Lázár, 1980–1988).  
 Handled pot (1938). Eight shallow pits were uncovered and unstratified finds were collected on the site of an Árpadian Age village (1980–1988).  
 Fragment of an interior decorated bowl with rectangular foot (*Kövecses-Varga* [2004] Pl. XI. 2–3).  
 MRT 5, 210, Site 8/74, Pl. 9. 3; *Kövecses-Varga* (2004).
- 102. Esztergom–Római Tábor környéke [area of the Roman camp] (County Komárom-Esztergom)**  
 Stray find (1930).  
 Somogyvár–Vinkovci type handled jug with cylindrical neck. EBM inv. no. 55.259.1.  
*Bóna* (1965a) 41, Pl. XII. 10 (“Between Esztergom and Tóváros”); MRT 5, 226, Site 8/\*\*; *Bondár* (1995) 251.
- 103. Érd–Site 1 (County Pest)**  
 Settlement.  
 Field survey (1972).  
 Body fragments of pots with brushed decoration and rim fragments.  
 MRT 7, 93, Site 9/1.
- 104. Fajsz–Fok (County Bács-Kiskun)**  
 Settlement.  
 Field survey (1961).  
*H. Tóth* (1990) Site 28; *Gallina* (1996) 14; *Tóth* (1998a) 57.

- 105. Fajsz–Garadomb** (County Bács-Kiskun)  
 Settlement.  
 Field survey (1986).  
 Few finds of the Makó/Somogyvár–Vinkovci/Early Nagyrév cultures.  
*H. Tóth* (1990) Site 29; *Gallina* (1996) 14; *Tóth* (1998a) 57; *idem* (1999) Fig. 2. 1–2.
- 106. Fajsz–Kovácsalom** (County Bács-Kiskun)  
 Settlement.  
 Stray finds.  
 Rim fragments of pots and a fragment of a larger vessel with triple rib decoration on the body.  
*Tóth* (1999) Fig. 3. 1, 3.
- 107. Farmos–Kása-dűlő** (County Pest)  
 Settlement.  
 Small-scale rescue excavation (1975–77).  
 Unstratified finds and partially excavated pits.  
*Dinnyés* (1977); *idem* (1978).
- 108. Felgyő–Tábi-tanya** (County Csongrád)  
 Settlement and burial.  
 Small-scale rescue excavation (János József Szabó, 2003).  
 Two pits and a cremation burial (?) of the Makó–Kosihy–Čaka culture.  
*Szabó* (2004).
- 109. Fót–Konya-Monya** (County Pest)  
 Settlement.  
 Stray finds and field survey (1976).  
 Body fragments with brushed decoration.  
 MRT 9, 97–98, Site 8/3.
- 110. Füzesabony–Pusztaszikszói gyümölcsös** (County Heves)  
 Settlement.  
 Field survey (1984).  
 Vessel fragments.  
*Sz. Kállay* (1985).
- \*111. Galgácsa–Homokbánya** [sand pit] (County Pest)  
 Settlement.  
 Field survey.  
 Vessel fragments. Fragment of the short, rectangular foot of an interior decorated bowl.  
*Dinnyés et al.* (1998) 120, Site 9/2.
- 112. Galgácsa–43 Kossuth Lajos Street** (County Pest)  
 Settlement.  
 Field survey.  
 Vessel fragments.  
*Dinnyés et al.* (1998) 127, Site 9/7.
- 113. Gáborján–Csapszékpart** (County Hajdú-Bihar)  
 Inurned burial.  
 Excavation of a Bronze Age tell settlement (1972).  
 Inurned burial with the ashes deposited in a large pot. The grave was dug into the natural subsoil. The single other grave good was the fragment of the lower part of a handled mug.  
*Sz. Máthé* (1988) 38, Pl. 46. 7; *Bóna* (1993) 79, note 91; *Dani* (1997a) 56–57; *idem* (1998) 57–60, Abb. 2, Abb. 3. 1–3.
- 114. Gelej** (County Borsod-Abaúj-Zemplén)  
 Settlement.  
 Excavation (Judit Koós, 1993).  
 Several pits. Unpublished.  
*Koós* (1998) 8.
- 115. Gelej–Kanálsdűlő** (County Borsod-Abaúj-Zemplén)  
 Stray find.



- A small, originally handled mug (H. ca. 4–5 cm), an unstratified find, was unearthed during the excavation of the Middle Bronze Age Füzesabony cemetery.  
*Kalicz* (1968) 69, Fo. 116, Taf. XXVII. 11; *Bóna* (1975a) Taf. 193. 13; *Kalicz* (1998a) 11.
- \*116. Gerla–Törpe ér** (County Békés)  
 Settlement.  
 Field survey (1986).  
 Two body fragments with brushed decoration. Rim fragment of an interior decorated bowl.  
*Nikolin* (1991) Site 74; MRT 10, 453, Site 5/74, Pl. 15. 4.
- \*117. Gyoma–Telki kerekő II** (County Békés)  
 Settlement.  
 Field survey (1975–1976, 1979).  
 Fragment of an interior decorated bowl.  
 MRT 8, 200, Site 4/47.
- \*118. Gyoma–Zichy Bala, Berettyó part** [Berettyó bank] (County Békés)  
 Settlement.  
 Field survey (1975).  
 Rim fragment of an interior decorated bowl.  
 MRT 8, 191, Site 4/20, Pl. 20. 6.  
**Gyomaendrőd, see 95. Endrőd–Site 161**
- \*119. Győr–Gázgyári homokgödör** [sandpit] (County Győr-Moson-Sopron)  
 Stray finds.  
 Three body fragments of an interior decorated bowl with a deeply excised wolf's tooth pattern.  
*Gallus* (1942) 48, Pl. XVII. 1–3; *Kalicz* (1968) 79, Fo. 47, Taf. X. 2–3; *Figler* (1994) 24, Fo. 1; *Ecsedy* (1979a) 108 (described as late Vučedol decoration).
- \*120. County Hajdú** (County Hajdú-Bihar)  
 Stray find.  
 Interior decorated bowl with cross shaped foot.  
*Kalicz* (1968) 68, Taf. XII. 2.
- 121. Hetényegyháza (Kecskemét)–Hobbikertek** [Hobby gardens] (County Bács-Kiskun)  
 Settlement.  
 Excavation (Attila Horváth, 1970).  
 Pits. Unpublished.  
*Horváth* (1988) 19; *H. Tóth* (1990) Site 34/a; *Horváth* (1992) 38.
- \*122. Heves–Paptag** (County Heves)  
 Settlement.  
 Stray finds found during construction work.  
 Rim fragment of an interior decorated bowl with a chequerboard pattern.  
*Kalicz* (1968) 79, Fo. 32, Taf. III. 4.
- 123. Héreg–Fekete Gyémánt lakópark** [Fekete Gyémánt housing estate] (County Komárom-Esztergom)  
 Settlement.  
 Small-scale rescue excavation (János László, 2004).  
 Stray finds.  
*László* (2005a).
- \*124. Hidegség** (County Győr-Moson-Sopron)  
 Stray finds.  
 Three fragments: fragment of an interior decorated bowl with cross shaped, decorated foot, and two body fragments of late Vučedol-type interior decorated bowls.  
*Willvonseder* (1939) 140, Abb. 4. 1–4; *Patay* (1940) 5; *Kalicz* (1968) 79, Fo. 51; *Ecsedy* (1979a) 108; *Figler* (1994) 24, Fo. 10.
- 125. Hosszúpályi–Homokbánya** [sandpit] (County Hajdú-Bihar)  
 Settlement.  
 Salvage excavation (4000 m<sup>2</sup>, János Dani, 2002).  
 Pits and the post-holes of a rectangular timber-framed building (Feature 31).  
*Dani* (2004).

**\*126. Hódmezővásárhely–Barci-rét (County Csongrád)**

Settlement.

Excavation (Katalin B. Nagy, 1964; Katalin Hegedűs, 1971); field survey (1996).

Pit (1964/XII/2) and stray finds.

Small fragments of interior decorated bowls (*Kulcsár* [1997] Pl. III. 1–2).

*Somogyvári* (1979); *Horváth* (1984a) 25, T. VIII. 3, T. IX. 1; *Kulcsár* (1997).

**127. Hódmezővásárhely–Gorzsa-Cukor-tanya (County Csongrád)**

Inurned burial.

Excavation (Gyula Gazdapusztai, 1957).

Inurned burial (Feature 9). The round grave pit (Diam. 75 cm) of the burial contained an urn with burnt bones and a small bowl. Next to the urn lay a handled jug and a jug with asymmetrical handles.

*Gazdapusztai* (1959) 17–18, Fig. 1, Pl. I. 1–3; *Kalicz* (1968) 78, 81, Fo. 10; *Kalicz-Schreiber* (1991) 12, Abb. 18. 3–6.

**\*128. Hódmezővásárhely–Gorzsa-Kovács István-tanya (County Csongrád)**

Vessel deposit (symbolic burial ?).

Lying next to an interior decorated bowl (H. ca. 6 cm) was the rim and basal fragment of a larger vessel and the rim fragment of a bowl. No ashes were found during the excavation of the burial, suggesting that it had been a symbolic burial resembling the one from Makó-Vöröskereszt.

The description of the foot of the interior decorated bowl is contradictory; it has been variously described as having a hollow foot (*Gazdapusztai* [1957] 88, Pl. XVIII. 1a–b) and a cross shaped foot (*Korek* [1984] 166).

*Gazdapusztai* (1957) 88, Pl. XVIII. 1–3; *Kalicz* (1968) 78, 81, Fo. 9; *Korek* (1984) 166.

**\*129. Hódmezővásárhely–Solt-Palé-Égető Bálint-tanya (County Csongrád)**

Settlement.

Excavation (János Banner, 1935).

Pit 13 with five restorable vessels and various unstratified finds. The unstratified finds from the site include interior decorated bowl fragments, pot and bowl fragments with brushed decoration and fragments of larger vessels.

Seven interior decorated bowl fragments: three interior decorated rim fragments; one interior and rim decorated rim fragment; two interior, exterior and rim decorated rim fragments and one interior and exterior decorated body fragment. They are mostly decorated in the stab-and-drag style, but excised triangles are also present (*Banner* [1939] 74, 76, Abb. 1. 2–3, 5–9).

*Banner* (1937) 62; *idem* (1939) 74, 76, Abb. 1. 2–3, 5–9, Abb. 3, Abb. 4. 1, 4; *Patay* (1938); *Kalicz* (1968) 77–78, Fo. 6; *V. Szabó* (1999) 54, Fig. 3.

**130. Hódmezővásárhely–Szakálhát-Díószegi Imre földje (County Csongrád)**

Settlement.

Excavation (János Banner).

Pit and stray finds. A rich pit (Pit 7) with seven restorable vessels. Early Bronze Age finds are also mentioned in the description of intersecting Pits 8–10–11,

*Banner* (1937) 32; *idem* (1939) 74–77, Abb. 2. 1–7; *Kalicz* (1968) 78, Fo. 8, Taf. II. 8–14.

**\*131. Hódmezővásárhely–Szakálhát-Nagy Sándor földje (County Csongrád)**

Stray find.

Small fragment of an interior decorated bowl.

*Banner* (1939) 74, Abb. 1. 1; *Patay* (1940) Pl. II. 3; *Kalicz* (1968) 78, Fo. 7.

**132. Ipolytölgyes–Szentmárton-dűlő (County Pest)**

Settlement.

Excavation (Kornél Bakay, 1969–1971).

There were a total of 28 pits yielding mixed finds around the medieval church. Among the Bronze Age finds, a few body fragments with brushed decoration were assigned to the Makó-Kosihy-Čaka culture.

MRT 9, 123, Site 10/15.

**133. Ipolytölgyes–TSz-major (County Pest)**

Settlement.

Field survey (1973–1974, 1976).

Body fragments with brushed decoration.

MRT 9, 116–117, Site 10/1.



**\*134. Iszkaszentgyörgy** (County Fejér)

Settlement.

Only selected finds were published, such as the rim fragment of an interior decorated bowl and the fragment of the lower part of a Somogyvár/Early Nagyrév mug. SzIKM inv. no. 11442–11443.

Rim fragment of an interior decorated bowl with roughly incised pattern (*Bándi* [1982] 166, Abb. 3. 2).  
*Bándi* (1982) 166, Abb. 3–4.

**\*135. Jánosszállás–Katonapart** (County Csongrád)

Settlement.

Excavation (Csanád Bálint, 1969).

Five pits. The pits were concentrated in two clusters, 52 meter apart (Pits 11, 15, 26 and Pits 18, 18.a).

Fragments of interior decorated bowls in Pits 18 and 18.a.

*Kürti* (1974) 29–38, Pl. 1a–b, Figs 1–13.

**136. Jászdózsa–Kápolnahalom** (County Jász-Nagykun-Szolnok)

Scattered cremation burial.

Excavation (István Bóna, Ilona Stanczik, 1966).

A scattered cremation burial was unearthed in level XVII of the Middle Bronze Age tell settlement, in the natural subsoil. Grave B/2: the bottom of the grave pit (55 cm x 35 cm, D. 40 cm) was covered with ashes. The single grave good was a handled jug containing pieces of charcoal and a clay bead.

*Stanczik* (1988) 42, 70; *Bóna* (1992a) 22; *Dani–Kulcsár* (2000).

**137. Kájárpéc–Pokolfadomb** (County Győr-Moson-Sopron)

Two scattered cremation burials.

Small-scale rescue excavation (András Figler, 1986).

Grave 1: *Figler* (1994) 22–23, 28, Abb. 10.

Grave 3: *Figler* (1996a) 10, Taf. III. 1–8.

**138. Kál–Legelő, III** (County Heves)

Cemetery.

Salvage excavation (János József Szabó, 1993).

6 inurned burials (Graves 14, 15, 17, 31, 32, 53).

*Kalicz* (1998a) 5; *Kulcsár–Szabó* (2000).

**139. Kánya** (County Somogy)

Inurned burial.

The single grave good was an amphora.

*Csalog* (1941) 10, Taf. VI. 2; *Kalicz* (1968) 80–81, Fo. 65.

**140–144. Kecel area** (County Bács-Kiskun)

Settlement.

Field surveys.

Piroska Biczó mentioned five Early Bronze Age/Makó–Kosihy–Čaka sites discovered during field surveys in the area of the village: Sites 46, 46/a, 55, 112, 122.

*Biczó* (1984) 43–44, 49–50, 61, Fig. 13; *Tóth* (1998a) 56.

**\*145. Kecskemét–Szikra** (County Bács-Kiskun)

Stray find.

Interior decorated bowl with low, solid foot.

*Patay* (1938) 23; *Patay* (1940) 2, Taf. I. 1a–b; *Kalicz* (1968) 78, Fo. 23.

**146. Kiskunfélegyháza–Kővágóér** (County Bács-Kiskun)

Settlement.

Excavation (Katalin Tóth).

*Somogyvári* (2007) 16.

**\*147. Kiskunhalas–Református Gimnázium gyűjteménye** [collection of the gymnasium of the Reformed Church] (County Bács-Kiskun)

Stray find.

Interior decorated bowl with a rectangular, hollow foot. H. 6.5 cm, dR. 19 cm. TJM inv. no. 55.160.90.

*Patay* (1940) 4; *Kalicz* (1968) 78, Fo. 19; *Horváth* (1984b) 5; *Tóth* (1998a) 61, Fig. 10. 1.

**148. Kismarja–Nagymarjai-dűlő** (County Hajdú-Bihar)

Settlement.

Rescue excavation (300 m<sup>2</sup>, Ibolya M. Nepper, Krisztián Szilágyi, 2002).

Three pits.

*M. Nepper-Szilágyi* (2004a).

**\*149. Kisvárdá–34 Boldogasszony Street** (County Szabolcs-Szatmár-Bereg)

Settlement.

Rescue excavation (Péter Németh, 1966).

Unstratified finds: a few pot rim fragments. A short, solid foot fragment and a body fragment of an interior decorated bowl.

JAM inv. no. 68.138.4; 68.140.6.<sup>1021</sup>

**\*150. Kiszombor–N** (County Csongrád)

Stray finds.

Vučedol type strap handle fragment. Body fragment of an interior decorated bowl.

*Kürti* (1974) 46, Figs 24–25.

**151. Kiszombor–Nagyszentmiklósi Road** (County Csongrád)

Settlement.

Salvage excavation (3000 m<sup>2</sup>, Béla Kürti, 2000).

Several pits and two open-air ovens.

*Tóth* (2001b) Note 33; *Kürti* (2003).

**152. Klárafalva area** (County Csongrád)

Stray finds.

Field survey.

*Kürti* (1974) 46, Note 142.

**\*153. Kompolt–Kistér (Site 14)** (County Heves)

Settlement and burials.

Salvage excavation (Andrea Vaday, 1994).

Settlement pit (Feature 7) and two cremation burials.

Grave 1 (Feature 8), inurned burial: *Gogáltan* (1999a) 20, 171, Pl. 17. 1–2, Pl. VI 1–2.

Grave 2 (Feature 115), scattered cremation burial: *ibidem* 66–67, 171, Pl. 17. 3–5, 7–8, Pl. VII. 1–2, Pl. VIII. 5. Interior decorated bowl with round, hollow foot. H. 7.5 cm, dR. 18 cm; *ibidem* 66–67, 171, Pl. 17. 3, Pl. VII. 2.

*Kalicz* (1998a) 5, 15–16; *Gogáltan* (1999a); *Bartosiewicz* (1999).

**154. Kondoros–Hartyáni-dűlő** (County Békés)

Settlement.

Field survey (1974, 1978).

Pot fragments, small handled mug fragments and body fragments with brushed decoration.

MRT 8, 297, Site 6/2.

**\*155. Koroncó–Galambostag, Gátórház** (County Győr-Moson-Sopron)

Stray finds.

Small body fragment of an interior decorated bowl decorated with a deeply excised wolf's tooth pattern.

*Gallus* (1942) 50, Pl. XVIII. 4; *Kalicz* (1968) 79, Fo. 48; *Ecsedy* (1979a) 108 (as Late Vučedol decoration).

**156. Kosd–Házhelyek** (County Pest)

Settlement.

Field survey (1981–1982).

Body fragments with brushed decoration.

MRT 9, 168, Site 14/41.

**157. Kömlő** (County Heves)

Stray find.

Nándor Kalicz mentioned a small handled mug (H. ca. 10 cm) from an unknown findspot in the area.

*Kalicz* (1968) 79, Fo. 34, Taf. III. 1.

**158. Kömlő–Szövetkezeti földék** (County Heves)

Settlement.

Field survey (József Danyi, 1995).<sup>1022</sup>

<sup>1021</sup> I am indebted to János Dani for his kind personal communication on the finds.

<sup>1022</sup> I would here like to thank József Danyi for kindly allowing me to publish the finds.



Fragments of bowls (*Pl. 3. 1, 3–4, Pl. 4. 1–2*), a small conical bowl (*Pl. 3. 2*), small, handled pots (*Pl. 3. 5–6*), pots (*Pl. 3. 7, Pl. 4. 4*), and of vessels with rib decoration (*Pl. 4. 3, 5–7*).

**159. Környe** (County Komárom-Esztergom)

Stray find.

Handled jug with long, cylindrical neck. HNM, gift.

*Bóna* (1965a) 41, Pl. XII. 4; *Bondár* (1995) 252.

**\*160. Kunadacs–Köztemető** [cemetery] (County Bács-Kiskun)

Settlement.

Excavation (Attila Horváth, 1982–1985).

Several pits, fragments of “bowls with lime-encrusted decoration” from two houses (?) (2 m x 3 m and 6 m x 10 m). Other finds include small handled mugs, wide-mouthed pots and interior decorated bowls.

*Horváth* (1984b) 5; *idem* (1988) 19; *H. Tóth* (1990) Site 58.

**\*161. Kunfehértó–Kovács-tanya** (County Bács-Kiskun)

Settlement.

Excavation (Márton Trillsam, 1975).

Pit. Bowl and pot rim fragments recovered from the pit. Interior decorated bowl fragments: cylindrical hollow foot, rim and body fragments (*Tóth* [1998a] 57–58, Fig. 1. 2, Fig. 2. 2–3, Fig. 5. 1).

*Tóth* (1998a) 57–58, Figs 1–4, Fig. 5. 1.

**\*162. Kunpeszér–Sinai-hegy** (County Bács-Kiskun)

Inurned (?) cremation burial.

Small-scale rescue excavation (Attila Horváth, 1961).

Ashes in a large urn, a cylindrical flask and two interior decorated bowls (*Tóth* [1998b] 4, Fig. 1) beside the urn.

*Horváth* (1962); *Kalicz* (1968) 78, Fo. 26; *Horváth* (1972); *idem* (1984b) 5; *idem* (1988) 18–19; *H. Tóth* (1990) Site 62; *Kalicz-Schreiber* (1994) 40 (here described as a scattered cremation burial); *Tóth* (1998b) 4, Fig. 1.

**163. Kunszentmárton (between Kunszentmárton and Szentés)** (County Jász-Nagykun-Szolnok)

Stray find.

Rescue excavation (Dezső Csallány, 1950).

Vessel with asymmetrical handles.

*Kalicz* (1968) 93, note 213; *Kalicz-Schreiber* (1991) 12.

**\*164. Kunszentmárton–Nagy Jaksor-ér partja** (County Jász-Nagykun-Szolnok)

Stray find.

Field survey (1979).<sup>1023</sup>

Small fragment of an interior decorated bowl.

**165. Lábatlan–Hosszú földék** (formerly Süttő–Vasúti őrház) (County Komárom-Esztergom)

Settlement.

Excavation (Nándor Kalicz, 1959).

Three pits. Pot fragments with brushed decoration, rim fragments of bowls. EBM inv. no. 71.37.51–66. Unpublished.

*Kalicz* (1959); *idem* (1968) 79, Fo. 46 (with mention of a pit); MRT 5, 245, Site 10/6.

**166. Lábatlan–Rózsa Ferenc Street** (County Komárom-Esztergom)

Inurned burial.

Small-scale rescue excavation (Gábor Vékony, 1969).

Probably an inurned burial (D. 130 cm): an urn, two mugs and two bowls. EBM inv. no. 71.2.1–5. Unpublished.

*Vékony* (1970a); MRT 5, 247, Site 10/17.

**167. Lébény–Kaszásdomb** (County Győr-Moson-Sopron)

Settlement.

Salvage excavation (Péter Tomka, Eszter Szőnyi, Miklós Takács, Gabriella Németh, 1992).

<sup>1023</sup> Thanks are due to Marietta Csányi and Gyöngyi Kovács for their kind personal communication on the finds.

- Unpublished.  
*Figler* (1994) 24, Fo. 11.
- 168. Létavértes–6 Irinyi Street (Peremartoni Nagy Móric kastély)** (County Hajdú-Bihar)  
 Inurned (?) burial.  
 Basal fragments of two vessels next to the urn. The urn was empty, containing neither earth, nor ashes.  
*Dani* (1998) 55–57, Abb. 1, Abb. 3. 4.
- 169. Magyarcsanád (Bökény)** (County Csongrád)  
 The site is located on the right bank of the River Maros.  
**a. Apátfalva–Bökény**  
 Stray find (1924).  
 Body fragment of a vessel. MFM inv. no. I-1924-13. Unpublished.  
*Banner* (1926); *Kürti* (1974) 45.  
**b. Bökény**  
 Stray find.  
 Two vessels are quoted from the collection of the Makó Archaeological Society: a handled jug and a bowl with a crescentic rib decoration on its shoulder.  
*Banner* (1939) 81; *Kalicz* (1968) 78, Fo. 17.  
**\*c. Magyarcsanád–Bökény**  
 Settlement and inurned burial.  
 Rescue excavation (Katalin B. Nagy, 1971).  
 Unstratified finds.  
 Grave 1: ashes in a pot. An interior decorated footed bowl (*Kürti* [1974] 39, Fig. 15), fragment of a bowl with crescentic rib decoration and the fragment of a metal pin in the burial (*ibidem* 38–39, Figs 14–17).  
*Kürti* (1974) 38–43, Figs 14–20.
- \*170. Makó–Kis-Gencs, Lonovics-dűlő** (County Csongrád)  
 Stray find.  
 Fragment of an interior decorated bowl.  
*Kürti* (1974) 46.
- \*171. Makó–Vöröskereszt** (County Csongrád)  
 Symbolic burial/vessel deposit.  
 Excavation (Mihály Párducz, 1938).  
 Six vessels, no ashes were found (depth of the grave pit: 50 cm).  
 Interior decorated bowl with cross shaped foot (H. 7.4 cm, dR. 19 cm; *Banner* [1939] 77–81, Fig. 6. 4 a–c; *Patay* [1940] 4; *Kalicz* [1968] 77, Fo. 1, Taf. II. 2).  
*Banner* (1939) 77–81, Abb. 5. 1–6, Abb. 6; *Patay* (1940) 4; *Kalicz* (1968) 77, 81, Fo. 1, Taf. II. 1–7.
- a. Makó–Vöröskereszt**  
 Settlement.  
 Excavation (Mihály Párducz, 1938).  
 Of the 34 pits excavated near the burial, seven (Pits 5, 17, 20, 21, 23, 26, 31) contained prehistoric finds (“Baden and Zók culture”).  
*Banner* (1939) 82, Abb. 7.
- 172. Makó area** (County Csongrád)  
 Settlement.  
 Field survey (Ferenc Horváth, János József Szabó).  
 Unpublished.  
*Kürti* (1974) 46, Note 143.
- \*173. Mezőberény–Belenczéres, Bakos-tanya** (County Békés)  
 Settlement  
 Field survey (1987).  
 Rim fragments of bowls and pots, body fragments with brushed surface. Rim fragment of an interior decorated bowl.  
 MRT 10, 559–560, Site 9/29, Pl. 15. 2.



- 174. Mezőberény–Belenczéres, Határ-zug** (County Békés)  
 Settlement.  
 Field survey (1987).  
 A few stray finds.  
 MRT 10, 560, Site 9/31.
- \*175. Mezőgyán–Gépműhely** (County Békés)  
 Settlement.  
 Small-scale rescue excavation (György Goldman, Júlia G. Szénászký).  
 Pit.  
 Interior decorated bowl fragment (*G. Szénászký* [1987–88] Fig. 11. 1 a–b).  
*G. Szénászký* (1987–88) 146, Fig. 9. 1, 3, 4, Fig. 10. 1–7, Fig. 11. 1, 3, 4.
- 176. Mezőkeresztes–Csincse-tanya** (County Borsod-Abaúj-Zemplén)  
 Settlement.  
 Salvage excavation (M3 Motorway, 1993).  
 Several pits. Unpublished.  
*Koós* (1998) 8.
- \*177. Mezőkovácsháza** (County Békés)  
 Settlement.  
 Interior decorated bowl and other fragments were reported from the pit excavated in the area of the medieval cemetery. Unpublished.  
*Banner* (1939) 80–81; *Kalicz* (1968) 77, Fo. 4.
- 178. Mezőkövesd–Mocsolyás** (County Borsod-Abaúj-Zemplén)  
 Inurned (?) cremation burial.  
 Salvage excavation (M3 Motorway, Nándor Kalicz, Judit Koós, 1993).  
 The grave inventory comprised three vessels: an amphora, a small pot and a pot.  
*Kalicz–Koós* (1997a) 28, Abb. 1; *Koós* (1998) 8, Abb. 1; *idem* (1999) Fig. 3. 1–3.
- 179. Mezőörs** (County Győr-Moson-Sopron)  
 Settlement.  
 Rescue excavation (András Figler, 1992).  
 Only a selection of the finds was published: a pot and a bowl fragment with everted rim.  
*Figler* (1994) 24–25, Fo. 12, Abb. 6. 14–15.
- 180. Mezőpeterd–Gát-szeg-dűlő (Site 14)** (County Hajdú-Bihar)  
 Settlement.  
 Rescue excavation (300 m<sup>2</sup>, MOL gas pipeline, Ibolya M. Nepper, Krisztián Szilágyi, 2002).  
 Pits. Unpublished.  
*M. Nepper–Szilágyi* (2004b).
- \*181. Miske–Telek** (County Bács-Kiskun)  
 Stray find.  
 Small fragment of an interior decorated bowl.  
*Tóth* (1999) Fig. 3. 2.
- \*182. Monoszló–Hegyestető** (County Veszprém)  
 Settlement.  
 Field survey (1962).  
 Body fragments with brushed decoration. Rim fragment of an interior decorated bowl.  
 MRT 1, 120, Site 31/1, Pl. 7. 1, 3.
- 183. Mosonszentjános–Kavicsbánya** [gravel pit] (County Győr-Moson-Sopron)  
 Settlement (?)  
 Excavation (Rezső Pusztai, Péter Tomka, 1967).  
 Unpublished.  
*Figler* (1994) 24, Fo. 7.
- 184. Mosonszentmiklós–Gyepföldek-dűlő and Gyártelep** (County Győr-Moson-Sopron)  
 Settlement.  
 Salvage excavation (Ágnes Aszt, 2000 (4500 m<sup>2</sup>), 2002).  
 Two ditches, 10–12 pits, post-holes (in 2000). Several pits and a ditch system (in 2002).  
*Aszt* (2001); *Kőrösi* (2001); *Aszt* (2004).

- 185. Mosonszentmiklós–Pálmajor** (County Győr-Moson-Sopron)  
Settlement and four cremation burials.  
Salvage excavation (András Figler, 1993–94).  
Unpublished.  
*Bartosiewicz* (1996); *Figler* (1996b); *idem* (1997); *Aszt* (2001) 213.
- \*186. Nagydém–Felsőrépáspusztá** (County Veszprém)  
Settlement.  
Small-scale rescue excavation (20 m<sup>2</sup>, Gábor Ilon, 1993).  
One feature.  
Interior decorated bowl with short, cylindrical foot-ring.  
*Ilon* (1995) 102, Site 51/1, Pl. XIII. 6.
- 187. Nagyhegyes–Elep 25** (formerly Elep 25) (County Hajdú-Bihar)  
Inhumation burial.  
The single grave good was a jug. H. 12.5 cm.  
*Kalicz* (1968) 64, Fo. 18, Taf. XIII. 10.
- 188. Nagykovácsi–Remete-hegyi Alsóbarlang and Felsőbarlang (Szurdok-völgy)** [Remete-hegy Upper Cave and Lower Cave] (County Pest)  
Cave.  
Stray finds.  
Bowl and pot fragments, and a mug (?). Unpublished.  
MRT 7, 123, Site 12/6; *Kalicz-Schreiber* (1994) Abb. 14.
- 189. Nagykovácsi–Remete-hegyi zsomboly** (County Pest)  
Cave.  
Stray finds.  
Vessel fragments.  
*Schreiber* (1972) 152; MRT 7, 124–125, Site 12/11; *Kalicz-Schreiber* (1994) Abb. 14.
- 190. Nagysáp–Esztergomi úti-dűlő** (County Komárom-Esztergom)  
Settlement.  
Field survey (1970).  
Body fragments with brushed decoration.  
MRT 5, 260, Site 14/9.
- 191. Nagyvázsony–Baráti-dűlő I** (County Veszprém)  
Settlement.  
Field survey (1965).  
Body fragments decorated in the stab-and-drag style, rusticated body fragments, rim fragments.  
MRT 2, 138, Site 33/10, Pl. 6. 8.
- \*192. Nagyvázsony–Baráti-dűlő-Csapás I** (County Veszprém)  
Settlement.  
Field survey (1965).  
Interior decorated bowl fragments.  
MRT 2, 138, Site 33/12, Pl. 6. 7.
- \*193. Nemesvámos–Kasza-dűlő** (County Veszprém)  
Vessel deposit/symbolic grave (?)  
Stray finds (1960).  
Originally five interior decorated bowls: three restorable, two fragmented. Footed bowls: one with a conical, one with a round, one with a rectangular, hollow foot, each decorated with a star motif in the interior.  
*Kalicz* (1968) 80–81, Fo. 57, Taf. V. 1a–b, 3a–b, 9a–b; MRT 2, 146, Site 34/6, Pl. 6. 11; *Kalicz* (1984a) Taf. XX. 1, 4, 7; *Kulcsár* (1999) 123, 127, Pl. 4. 55/1–3.
- 194. Nyergesújfalu–Józsefpusztá** (County Komárom-Esztergom)  
Settlement.  
Small-scale rescue excavation (Gábor Vékony, 1969).  
A partially destroyed sunken building and its post-holes were uncovered in the sand-pit. Remains of several ovens. Additional pits were identified during a field survey. Unpublished.  
*Vékony* (1970b); MRT 5, 272, Site 15/19; *V. Vadász–Vékony* (1979) 59.



- \*195. Nyíregyháza–Morgó (Temető)** (County Szabolcs-Szatmár-Bereg)  
 Stray find.  
 Rim and round, hollow foot fragment of an interior decorated bowl.  
*Kalicz* (1968) 65, 75, Fo. 29, Taf. XXVI. 1–2.
- 196. Nyíregyháza–Oros–Belterület** [Inner area] (County Szabolcs-Szatmár-Bereg)  
 Inurned burial.  
*Kalicz* (1968) 68, Fo. 87, Taf. XVI. 9; *Kalicz* (1984b) 113, Taf. XXVII. 5; *Dani* (1997a) 57; *Kulcsár* (1998) 43.
- \*197. Nyírgyulaj–Belterület** [Inner area] (County Szabolcs-Szatmár-Bereg)  
 Stray find.  
 Fragment of an interior decorated bowl.  
*Kalicz* (1968) 68, Fo. 90.
- \*198. Orgovány–Szelei domb** (County Bács-Kiskun)  
 Settlement.  
 Pits. Details not specified.  
 Fragment of an interior decorated bowl with “lime-encrusted decoration” from one of the pits.  
 Unpublished.  
*Horváth* (1984b) 5; *idem* (1988) 19; *H. Tóth* (1990) Site 83.  
**Oros–Belterület**, see 196. Nyíregyháza–Oros–Belterület
- \*199. Orosháza–Pusztaföldvár–Nagyatársánc** (County Békés)  
 Stray find.  
 Rim fragment of an interior decorated bowl.  
*Banner* (1939) 84, Abb. 1. 4; *Kalicz* (1968) 77, Fo. 5.
- 200. Osli–Falu helyi-dűlő** (County Győr-Moson-Sopron)  
 Settlement (?)  
 Excavation (Gyula Nováki, 1957).  
 Unpublished.  
*Figler* (1994) 24, Fo. 4.
- \*201. Oslár–Nyárfaszög** (County Borsod-Abaúj-Zemplén)  
 Settlement and inurned burials.  
 Salvage excavation (200,000 m<sup>2</sup>, Judit Koós, 1996–97).  
 20 pits scattered across an area of 100 m<sup>2</sup> and four inurned burials:  
 Grave 180: *Koós* (1998) 11, Abb. 3. 2; *idem* (1999) 105–106, Fig. 4. 2.  
 Grave 181: *Koós* (1998) 11, Abb. 3. 3; *idem* (1999) 105–106, Fig. 4. 3.  
 Grave 189: *Koós* (1998) 11, Abb. 3. 1; *idem* (1999) 105–106, Fig. 4. 1.  
 Disturbed inurned burial: *Koós* (1998) 11; *idem* (1999) 105–106.  
 Body, rim and various cross shaped foot fragments of interior decorated bowls from the settlement (Pits 1019, 1034, 1075, 1077: *Koós* [1999] Fig. 5. 1–9, Fig. 16. 7).  
*Kalicz–Koós* (1997b) 66, Abb. 2; *Koós* (1998) 10–14, Abb. 3–14; *idem* (1999).
- 202. Örménykút–Palyó-tanya** (County Békés)  
 Settlement.  
 Field survey (1979).  
 Disturbed vessel hoards (pits ?) indicating a settlement.  
 MRT 8, 356, Site 7/68.
- \*203. Örménykút–Szilai-halom**<sup>1024</sup> (County Békés)  
 Settlement.  
 Small-scale rescue excavation (János József Szabó, 1977).  
 The kurgan located on the border of Örménykút and Endrőd was disturbed by earth-moving operations. A pit of the Makó–Kosihy–Čaka culture was partially excavated at the foot of the kurgan. The pit yielded fragments of an interior decorated bowl (*Pl. 2. 1*), fragment of a round, hollow foot (*Pl. 2. 3*), rim fragments of a conical and biconical bowl (*Pl. 2. 2, 4–7*) and pot/amphora fragments (*Pl. 2. 8–9*).  
*Szabó* (1978b); MRT 8, 339, Site 7/6.

<sup>1024</sup> I would here like to thank János József Szabó for kindly allowing me to publish the finds.

- \*204. Papkeszi–Cigánylap** (County Veszprém)  
 Settlement.  
 Field survey (1964).  
 Fragment of an exterior and interior decorated bowl.  
 MRT 2, 170, Site 39/5.
- \*205. Papkeszi–Rostás** (County Veszprém)  
 Settlement.  
 Field survey (1964).  
 Fragment of an exterior and interior decorated bowl.  
 MRT 2, 173–174, Site 39/20, Pl. 6. 6.
- 206. Páty–Hegyi-dűlő** (County Pest)  
 Settlement.  
 Field survey (1974).  
 Pot rim and body fragments with brushed decoration; bowl fragments.  
 MRT 7, 127, Site 13/2.
- 207. Penc–Hosszú-völgy (Uhlovizsko alatt)** (County Pest)  
 Settlement.  
 Field survey (1986).  
 Body fragment of a pot with brushed decoration and wide strap handle.  
 MRT 9, 266, Site 22/13.
- 208. Perbál–Malomföldek** (County Pest)  
 Settlement.  
 Field survey (1974).  
 Body fragments with brushed decoration, rim fragments.  
 MRT 7, 138, Site 14/12.
- 209. Perbál–Töki-határföldek** (County Pest)  
 Settlement.  
 Field survey (1974).  
 A few body fragments with brushed decoration and pot rim fragments.  
 MRT 7, 138, Site 14/16.
- 210. Perbál–Zsidó-földek and Fejszés-földek** (County Pest)  
 Settlement.  
 Field survey (1971).  
 Pot rim fragments.  
 MRT 7, 134, Site 14/3.
- 211. Perőcsény–Útelágazás** [road junction] (County Pest)  
 Settlement.  
 Field survey (1974).  
 Body fragments with brushed decoration.  
 MRT 9, 278, Site 23/4.
- \*212. Perőcsény–Jancsi-hegy** (County Pest)  
 Settlement.  
 Excavation (Zsuzsa Miklós, 1986).  
 Mt. Jancsi-hegy is a 586 m high peak of the north to south running ridge at the western edge of the Magas-Börzsöny Mts. No settlement features were found.  
 The most characteristic finds were two rim and body fragments of interior decorated bowls (MRT 9, Site 23/19, Pl. 13. 1–2), body fragments of pots with brushed decoration and conical bowls.  
 MRT 9, 286–287, Site 23/19, Pl. 13. 1–15.
- \*213. Piliny–Várhegy** (County Nógrád)  
 Settlement.  
 Sray finds.  
 Fragment of an interior decorated bowl.  
*Bóna* (1992a) 11; *Patay* (1999) 52, Fig. 6. 1.



- 214. Pilismarót–Felső Szélesek** (County Komárom-Esztergom)  
 Settlement.  
 Field survey (1964, 1972).  
 Bowl fragments, pot fragments with thickened rim and brushed decoration.  
 MRT 5, 290, Site 17/20.
- \*215. Pilismarót–Homoki-szőlők III** (County Komárom-Esztergom)  
 Settlement.  
 Field survey (1964, 1966, 1969).  
 Traces of pits on a site extending along the Danube bank. Fragment of an interior decorated bowl and a clay wheel model.  
 MRT 5, 292, Site 17/29.
- 216. Pilismarót–38 Dózsa György Street** (County Komárom-Esztergom)  
 Stray find.  
 Small-scale rescue excavation (1970).  
 Makó–Kosihiy–Čaka-like body fragments were unearthed from an 11th century grave.  
 MRT 5, 292–293, Site 17/30.
- 217. Polgár–Király-érpart (Site 1)** (County Hajdú-Bihar)  
 Settlement.  
 Salvage excavation (1994–95).  
 A Makó–Kosihiy–Čaka pit (Pit 231/220) was found lying some 16 m from the four pits of the Nyírség culture.  
*Dani* (1999) 68.
- \*218. Polgár–Nagy Kasziba (Site 12)** (County Hajdú-Bihar)  
 Settlement.  
 Salvage excavation (1996).  
 Pit (Pit 156/180).  
 Fragments of interior decorated bowls. Unpublished.  
*Sz. Máthé et al.* (1997) 59–60; *Dani* (1999) 68.
- \*219. Pomáz–Új-dűlő** (County Pest)  
 Settlement.  
 Field survey (1970).  
 A few pot body fragments with brushed decoration and bowl fragments. Body fragment of an interior decorated bowl.  
 MRT 7, 190–191, Site 23/7.
- \*220. Pusztaszer–Felsőpusztaszer A** (County Csongrád)  
 Stray find.  
 Interior and rim decorated bowl with a round, hollow foot. H. 7.3 cm, dR. 16 cm.  
*Patay* (1938) 25, Taf. II. 1; *idem* (1940) 3, Pl. I. 4; *Kalicz* (1968) 78, Fo. 21.
- 221. Rákóczi falva** (County Jász-Nagykun-Szolnok)  
 Stray find.  
 Two-handled urn. H. approximately 30 cm.  
*Kalicz* (1968) 79, Fo. 36, Taf. III. 12.
- 222. Rákócziújfalu–Felsővarsány** (County Jász-Nagykun-Szolnok)  
 Settlement and inurned burial.  
 Rescue excavation (MOL gas pipeline, Marietta Csányi, 2003).  
 A shallow pit and a disturbed inurned cremation burial with four or five vessels: a large urn, a bowl and smaller mugs.  
*Csányi* (2004) 276.
- 223. Salgótarján–Baglyas** (County Nógrád)  
 Settlement.  
 Stray finds.  
 Vessel fragments of the Baden and Makó–Kosihiy–Čaka cultures. Unpublished.  
*Kalicz* (1968) 79, Fo. 29.

**\*224. Salgótarján–Pécskő szikla** (County Nógrád)

Settlement.

Excavation (József Korek, Pál Patay, 1960).

The layer above the Baden occupation level yielded unstratified Makó–Kosihiy–Čaka finds (pottery and mould fragments). Additional stray finds are known from the Bene Collection, which include fragments of interior decorated bowls.

Rim, body and round, hollow foot fragments of interior decorated bowls (*Kalicz* [1968] 79, Fo. 31, Taf. III. 9–11; *Korek* [1968] Taf. XIV. 1–11; *Patay* [1999] 46, 52, Fig. 6. 2–3).

*Kalicz* (1968) 79, Fo. 31, Taf. III. 6–11, 13–14; *Korek* (1968) 46–47, 57–58, Taf. III. 1–4, Taf. VI. 2–9, Taf. XII. 1–3, Taf. XIV. 1–11; *Patay* (1999) 46, 52, Fig. 6. 2–3.

**225. Salgótarján–Pécskő puszta** (County Nógrád)

Settlement.

Small-scale rescue excavation (2003).

Remains of a north to south oriented house with three rows of timber posts (13 m x 19 m). A few unstratified finds.

*Gall–Tankó* (2007).

**226. Solymár–Krautgarten-dűlő** (County Pest)

Settlement.

Field survey (1970s).

Body fragments with brushed decoration.

MRT 7, 214, Site 25/4.

**227. Sopronkőhida** (County Győr-Moson-Sopron)

Settlement (?).

Excavation (Gyula Török, 1958).

Unpublished.

*Figler* (1994) 24, Fo. 5.

**\*228. Sóly–Rétmelléki-dűlő** (County Veszprém)

Settlement.

Field survey (1964).

Rim fragment of an interior decorated bowl.

MRT 2, 184, Site 42/4.

**229. Sövényháza–Kőtörés** (County Csongrád)

Stray find.

Ferenc Horváth mentions “an encrusted vessel of the Zók culture”.

*Horváth* (1984a) 10, Site 4, Tab. II. 3.

**\*230. Süttő–Tatai úti-dűlő II** (County Komárom-Esztergom)

Settlement.

Field survey (1968).

Body fragments of interior decorated bowls; rim and body fragments of pots with brushed decoration.

MRT 5, 315, Site 20/13, Pl. 9. 4–5.

**Süttő–Vasúti őrház, see 165. Lábatlan–Hosszú-földek**

**231. Süttő** (County Komárom-Esztergom)

Stray finds.

Bowl and pot fragments (EBM inv. no. 62.99.1–3), and a shaft-hole axe (HNM inv. no. 4/1906).

MRT 5, 319, Site 20/\*\*\*.

**232. Szabadszállás–Aranyegyháza** (County Bács-Kiskun)

Stray find.

Bowl fragment.

*Horváth* (1984b) 5.

**\*233. County Szabolcs** (County Szabolcs-Szatmár-Bereg)

Stray finds.

Two plain, conical bowls with hollow foot (H. 4 cm and 5 cm) and an urn.

*Kalicz* (1968) 68, 74–75, Taf. XVI. 7, Taf. XVII. 4–5.



**234. Szarvas–Bezinai szőlők II** (County Békés)

Settlement.

Disturbed pit yielding a few finds (1977).

MRT 8, 387, Site 8/10.

**\*235. Szarvas–Bolza kastély** (County Békés)

Stray finds (settlement and burial?) (1967).

Two one-handled, biconical mugs (H. ca. 8 cm and 10.6 cm). In view of their intact condition, the vessels may have been grave goods. Stray finds indicating a settlement were also found.

Rim and interior decorated bowl with hollow, cross shaped foot (H. ca. 6 cm, dR. 20 cm; MRT 8, 403, Site 8/25.e, Pl. 19. 1a–c).

MRT 8, 403, Site 8/25.e, Pl. 19. 1a–c, 6.

**\*236. Szarvas–Érpart, Sonkoly-tanya** (County Békés)

Settlement.

Field survey (1974).

Body fragments with rusticated surface. Fragment of an interior and exterior decorated bowl.

MRT 8, 389, Site 8/16, Pl. 20. 7.

**237. Szarvas–Káka-Kettőshalom** (County Békés)

Stray find.

Excavation (Győző János Szabó, 1954).

Mug with biconical body and cylindrical neck (H. 9 cm). The mug was found in a late Avar grave (Grave 3).

MRT 8, 441–443, Site 8/108, Pl. 19. 9.

**238. Szarvas** (County Békés)

Stray find.

Large urn with squat, ovoid body. H. 21.4 cm.

MRT 8, 481, Site 8/XLII, Pl. 19. 2.

**\*239. Szeged–Kiskundorozsma, Nagyszék I** (County Csongrád)

Settlement.

Salvage excavation (M5 Motorway, Site 26/68; 26,700 m<sup>2</sup>, Katalin Tóth, Csaba Szalontai, 1999).

Eight pits forming three clusters.

Interior decorated bowl from Pit 55 (*Szalontai–Tóth* [2003a] Fig. 4).

*Tóth* (2001a) 28; *idem* (2003) 66; *Szalontai–Tóth* (2003a) 63–64.

**240. Szeged–Kiskundorozsma, Nagyszék II** (County Csongrád)

Inurned burials.

Salvage excavation (M5 Motorway, Site 26/72; 55,099 m<sup>2</sup>, Katalin Tóth, Csaba Szalontai, 1998–1999).

Three inurned burials:

Grave 1615: *Tóth* (2002) 31–32, Fig. 4. 1–2, Fig. 6. 1, 3, Fig. 7. 1–2, Fig. 9. 1, 3.

Grave 1616: *ibidem* 32, Fig. 4. 4, Fig. 6. 2, 4, Fig. 7. 3–4, Fig. 9. 2, 4.

Grave 1630: *ibidem* 32, Fig. 5. 1, Fig. 6. 5, 7, Fig. 7. 5–6, Fig. 10. 1, 3.

*Tóth* (2002); *Szalontai–Tóth* (2003b) 74–76.

**\*241. Szeged–Kiskundorozsma, Subasa** (County Csongrád)

Settlement and burial.

Salvage excavation (M5 Motorway, Site 26/73; 20,900 m<sup>2</sup>, Katalin Tóth, Csaba Szalontai, 1998, 2000).

Early Bronze Age features scattered across a 7000 m<sup>2</sup> large area.

27 Early Bronze Age pits and 27 uncertain, but probably Early Bronze Age pits. An open-air oven with a plastered ash-pit and the remains of a timber bridge over the Maty Brook were also uncovered.

An inurned cremation burial (Grave 234, Diam. 60 cm, D. 16 cm) lay approximately 68 m south of the settlement (*Tóth* [2002] 33, Fig. 5. 2–3, Fig. 6. 6, 8, Fig. 8. 1–2, Fig. 10. 2, 4). Burnt bones and an interior decorated bowl were found in the urn.

The burial contained an interior decorated bowl (H. 5.8 cm, dR. 15.3 cm; *ibidem* 33, Fig. 8. 2, Fig. 10. 2). The finds from the settlement included an interior decorated bowl with low, round, hollow foot (*Tóth* [2003] Fig. 4).

*Tóth* (2002); *Szalontai–Tóth* (2003c); *Tóth* (2004).

- \*242. Szeghalom–Dióér** (County Békés)  
 Settlement.  
 Excavation (István Ecsedy, 1971).  
 Unstratified finds: rim fragment of an interior decorated bowl.  
 MRT 6, 154, Site 11/80, Pl. 24. 6.
- 243. Szeghalom–Kisfás** (County Békés)  
 Settlement.  
 Field survey (1971).  
 Disturbed pits.  
 MRT 6, 158, Site 11/96.
- 244. Szeghalom–Környe** (County Békés)  
 Settlement.  
 Small-scale rescue excavation (5000 m<sup>2</sup>, György Goldman, Júlia G. Szénászký).  
 Pit.  
*G. Szénászký* (1987–88) 146, 152, Pl. 8. 1–2, 4, 6, Pl. 9. 2, Fig. 11. 2.
- 245. Szeghalom–Szeghalmi-mágor** (County Békés)  
 Settlement.  
 Stray find (1974).  
 MRT 6, 168, Site 11/165.
- 246. Szentendre–Belterület** (County Pest)  
 Settlement.  
 Stray finds.  
 Pot rim and body fragments with brushed decoration.  
 MRT 7, 264, Site 28/3, Pl. 8. 14.
- \*247. Szentendre–HÉV-végállomás** [HÉV station] (County Pest)  
 Settlement.  
 Small rescue excavations (Sándor Sashegyi, 1949, 1952, 1968).  
 The multi-period site yielded unstratified Makó–Kosihy–Čaka finds on several occasions. Pit sections (1949), fragments of interior decorated bowls, pots and mugs (1952) and other unstratified finds (1968) were brought to light.  
 Fragments of interior decorated bowls (MRT 7, 279, Site 28/22, Pl. 8. 1–3, 6).  
 MRT 7, 279, Site 28/22, Pl. 8. 1–12.
- 248. Szentendre–Papsziget** (County Pest)  
 Settlement.  
 Field survey (1969).  
 Rim fragment of a pot.  
 MRT 7, 274, Site 28/10.
- \*249. Szentes–Jaksorpart** (County Csongrád)  
 Stray finds.  
 Fragment of a handled jug. Low interior decorated bowl with a hollow foot. H. 6.5 cm, dR. 16 cm.  
*Patay* (1938) 25, Taf. II. 2; *idem* (1940) 3, Taf. II. 1a–b; *Gazdapusztai* (1957) 79–80, Pl. XVIII. 4; *Kalicz* (1968) 78, Fo. 15.
- \*250. Szentes–Unknown site** (County Csongrád)  
 Stray find.  
 Fragment of an interior and rim decorated bowl. dR. ca. 20–22 cm.  
*Patay* (1940) 3, Taf. II. 2a–b; *Kalicz* (1968) 78, Fo. 16.
- 251. Between Szentes and Orosháza** (County Csongrád)  
 Stray find.  
 Mug with asymmetrical handles. H. 8.6 cm, dR. 6.8 cm. MFM inv. no. 20/1905 (*Pl. I. 1*).  
*Kalicz* (1968) 78, 93, Fo. 13.
- \*252. Szentkirályszabadja** (County Veszprém)  
 Stray find.  
 Rim fragment of an interior decorated bowl.  
*Patay* (1938) 23; *idem* (1940) 2, Taf. I. 2; *Kalicz* (1968) 80, Fo. 58; MRT 2, 191, Site 44/\*\*\*.



**253. Székesfehérvár** (County Fejér)

Stray finds.

Early Bronze Age jug of the Somogyvár (?) type.

*Bánda* (1982) 176, Abb. 12. 4.

**254. Székesfehérvár–Zámolyi Road** (County Fejér)

Settlement.

Only a selection of the finds was published. SzIKM inv. no. 8012.

*Bánda* (1982) 166, Abb. 5.

**\*255. Székkutas–Diófás-dűlő** (County Csongrád)

Settlement.

The few stray pottery finds included the rim and body fragments of two interior decorated bowls with a simple linear pattern in the stab-and-drag style.

*V. Szabó* (1999) 53, note 5, Fig. 2.

**\*256. Szigetmonostor–Felső-rétek** (County Pest)

Settlement.

Stray finds.

Body fragments of pots with brushed decoration. Fragment of an interior decorated bowl with cross shaped foot.

MRT 7, 297–299, Site 29/13, Pl. 8. 13.

**\*257. Szigetszentmiklós–Vízcsőárok II** (County Pest)

Settlement.

Excavation (Rózsa Schreiber, 1972).

Only fragments of interior decorated bowls were published.

*Schreiber* (1984a) Fig. 1. 6, 5, 9; *Kalicz-Schreiber* (1994) Abb. 14.

**258. Szomód–Felsőgyep** (County Komárom-Esztergom)

Settlement.

Field survey (Éva V. Vadász, Gábor Vékony, 1968).

Pot body fragments.

KDM inv. no. 70.11.1–11. Unpublished.

**\*259. Tarnabod–Berekalja** (County Heves)

Settlement.

Excavation (Nándor Kalicz, 1974).

12 pits.

Fragments of two interior decorated bowls (Pits II/1, IIIa: *Kalicz* [1998a] Fig. 8. 5, Fig. 9. 2).

*Kalicz* (1976b) 152–153; *Schreiber* (1984a) Fig. 1. 1a–b–2; *Kalicz* (1998a) 5–13, Figs 1–13.

**260. Tarnaszárd** (County Heves)

Inhumation burial (?).

The vessel with asymmetrical handles presented to the HNM in 1943 was reportedly found beside a skeleton.

*Kalicz* (1968) 80, Fo. 70, Taf. III. 2.

**\*261. Tata–Tófarok, Derítő** (County Komárom-Esztergom)

Scattered cremation (?) burial.

The accidental discovery of the burial was followed by a field survey (Éva V. Vadász, Gábor Vékony, 1968).

Grave goods: seven mugs, two small handled vessels and an intact interior decorated bowl with round, hollow foot (*Kalicz-Schreiber* [1991] 9, Fig. 4. 7; *idem* [1994] 40, Abb. 13. 7).

*V. Vadász-Vékony* (1969); *V. Vadász-Vékony* (1979) 59–60, Pl. II; *Vékony* (1988); *Kalicz-Schreiber* (1991) 9, Fig. 4. 1–7; *idem* (1994) 40, Abb. 13. 1–7.

**262. Tatabánya–Birkás rét** (County Komárom-Esztergom)

Settlement.

Small-scale rescue excavation (János László, 2004).

Pit.

*László* (2005b).

- \*263. Tatabánya–Dózsakert** (County Komárom-Esztergom)  
 Settlement and symbolic grave.  
 Excavation (Gábor Vékony, 1977; Gábor Vékony, Julianna Cseh, 1993–1999, 5400 m<sup>2</sup>).  
 A timber-framed house (Feature 61/99) with an open-air oven, at least six pits and many unstratified finds.  
 A symbolic grave with two vessels: a larger and smaller pot.  
 Fragments of eight interior decorated bowls were found in Pit 60/99.  
*Vékony* (1978a); *Vékony–Cseh* (2001) 167; *Cseh–Vékony* (2002); *Kisné Cseh–Vékony* (2002).
- 264. Tatabánya–Réti Road** (County Komárom-Esztergom)  
 Settlement.  
 Small-scale rescue excavation (Gábor Vékony, 1977).  
 Pit.  
*Vékony* (1978b).
- \*265. Táp–Borbapuszta** (County Győr-Moson-Sopron)  
 Settlement  
 Excavation (Péter Tomka, 1983–1985).  
 13 pits. A selection of the finds published from Pits I and M.  
 Rim and body fragments of interior decorated bowls (Pit I: *Figler* [1994] 21, 26, Abb. 6. 1–5), and fragment of an interior decorated bowl with a low, rectangular hollow foot (Pit M: *ibidem* 21, 25, Abb. 4. 1).  
*Figler* (1994) 21–22, 24–26, Fo. 6, Abb. 4–5, Abb. 6. 1–13, 16–19; *Bartosiewicz* (1996).
- \*266. Tápiószele** (County Pest)  
 Stray find.  
 Rim and interior decorated bowl fragment. CKM inv. no. 52.49.  
*Dinnyés* (1973) 39, Pl. II. 8.
- \*267. Tápiószele–Szkíta temető** [Scythian cemetery] (County Pest)  
 Settlement.  
 Excavation.  
 Pit.  
 Characteristic rim fragments of interior decorated bowls. HNM inv. no. 12.1959.1–9.  
*Kalicz* (1968) 78, Fo. 24, Taf. IX. 18–36.
- \*268. Tét–Szarkavár** (County Győr-Moson-Sopron)  
 Stray find.  
 Fragment of the lower part of an interior decorated bowl with short, cross shaped, hollow foot. H. 3.2 cm.  
*Patay* (1940) 4; *Gallus* (1942) 49, Pl. XVII. 5, 7; *Kalicz* (1968) 79, Fo. 50; *Ecsedy* (1979a) 108 (Somogyvár–Vinkovci culture); *Figler* (1994) 24, Fo. 8.
- \*269. Tihany–Óvár** (County Veszprém)  
 Settlement.  
 Stray find (1965).  
 Exterior decorated body fragment of an interior decorated bowl with a linear pattern in the stab-and-drag style.  
 MRT 2, 197, Site 45/13.
- \*270. Tihany–Rév** (County Veszprém)  
 Stray find.  
 An interior decorated bowl was reportedly found. Unpublished.  
*Kalicz* (1968) 80, Fo. 56.
- \*271. Tihany–Rév (Láp)** (County Veszprém)  
 Settlement.  
 Stray finds.  
 Handled mug and foot fragment of an interior decorated bowl with round, hollow foot. H. 5.7 cm, dB. 7.8 cm.  
*Kalicz* (1968) 80, Fo. 56; MRT 2, 198, Site 45/16, Pl. 6. 5, 20.



- \*272. Tiszabercel–Nagyvér** (County Szabolcs-Szatmár-Bereg)  
 Stray finds.  
 Fragments of an interior decorated bowl with round, hollow foot. JAM inv. no. 57.196.1.  
*Patay* (1940) 4; *Kalicz* (1968) 66, 75–76, Fo. 56, Taf. XXIII. 17–19.
- \*273. Tiszacsege–Sand pit** (County Hajdú-Bihar)  
 Burial.  
 Mug, probably the grave good of a contracted inhumation burial. H. ca. 11.2 cm.  
*Kalicz* (1968) 64, Fo. 19, Taf. XIII. 8; *Dani* (2005a) 285, Fig. 1. 2.
- \*274. Tiszacsege–Sóskás** (County Hajdú-Bihar)  
 Stray find from a Migration period feature.  
 Small-scale rescue excavation (Ibolya M. Nepper, Máthé Sz. Máthé, 1982).  
 Rim fragment of an interior decorated bowl with a simple, incised and stab-and-drag pattern. DDM inv. no. 98.32.1.<sup>1025</sup>  
*Dani* (2005a) 283, Fig. 1. 1.
- \*275. Tiszadada–Téglavető környéke** [area of the brickyard] (County Szabolcs-Szatmár-Bereg)  
 Stray find.  
 Fragment of the plain variant of interior decorated bowls with hollow foot. JAM inv. no. 57.215.1.  
*Kalicz* (1968) 66, 75, Fo. 40, Taf. XVI. 12.
- \*276. Tiszafüred area** (County Jász-Nagykun-Szolnok)  
 Stray find.  
 Fragment of the lower part of an interior decorated footed bowl.  
*Kalicz* (1968) 79, Fo. 35, Taf. III. 5.
- \*277. Tiszakürt–Homoki szőlő** (County Jász-Nagykun-Szolnok)  
 Settlement.  
 Excavation (Pál Raczky, 1978).  
 Five pits.  
 Fragment of an interior decorated bowl with short, cylindrical foot-ring (Pit 5: *Csányi* [1996] 52, Pl. XIV. 6, Pl. XVI. 9).  
*Csányi* (1996).
- \*278. Tiszalúc–Sarkadpuszta** (County Borsod-Abaúj-Zemplén)  
 Settlement.  
 Excavation (Pál Patay, 1976–1984).  
 20 pits and various unstratified finds.  
 Rim and body fragments of interior decorated bowls (*Szathmári* [1999a] Fig. 1. 9, Fig. 2. 1–2, 8; *idem* [1999b] 34, Taf. II. 9, Taf. III. 1, 3, Taf. IV. 1, Taf. VII. 2, 11, 13, Taf. XV. 3, 5).  
*Kalicz* (1981) 72–73, Abb. 2–4; *Szathmári* (1999a); *idem* (1999b).
- \*279. Tiszaörvény–Temetődomb (Örvény–Temetődomb)** (County Jász-Nagykun-Szolnok)  
 Stray find.  
 Small-scale rescue excavation (1943).  
 Fragment of an interior decorated footed bowl. HNM inv. no. 1/1943. Unpublished.  
*Kalicz* (1968) 79, Fo. 33.
- \*280. Tiszapüspöki–Karancs, Háromág-dűlő** (County Jász-Nagykun-Szolnok)  
 Settlement.  
 Excavation (3700 m<sup>2</sup>, Marietta Csányi, János Cseh, Judit Tárnoki, 1999).  
 11 features, amongst them a sacrificial pit (Feature 113).  
 Interior decorated bowl and fragments of similar bowls (*Csányi–Cseh–Tárnoki* [2002] 48–50, Fig. 3. 4–6, Fig. 4. 2, 6).  
*Csányi–Cseh–Tárnoki* (2002) 48–50, Figs 2–5.
- \*281. Tiszasziget–Őszentiván, Site VIII** (County Csongrád)  
 Settlement.  
 Stray find.  
 Fragment of an interior decorated bowl with excised decoration.  
*Banner* (1942) Abb. 1; *Kalicz* (1968) 77, Fo. 3.

<sup>1025</sup> I am indebted to János Dani for his kind personal communication on the finds.

- 282. Tiszavasvári–Paptelekhát** (County Szabolcs-Szatmár-Bereg)  
 Settlement.  
 Excavation (Nándor Kalicz, János Makkay, 1956).  
 Unstratified Makó–Kosihy–Čaka-like finds among the Nyírség finds.  
*Kalicz* (1968) 65, Fo. 35, and 86, Taf. XVIII. 11–13.
- 283. Tokod–Két Nyárfa-dűlő** (County Komárom-Esztergom)  
 Settlement.  
 Field survey (1970).  
 Rim fragment of a pot.  
 MRT 5, 326, Site 22/2.
- 284. Tótkomlós–Viharsarok TSZ** (County Békés)  
 Stray finds.  
 Body fragments with brushed decoration.  
*Kalicz* (1965) 98, Pl. VI. 1–3.
- 285. Tök–Belterület** [Inner area] (County Pest)  
 Settlement.  
 Field survey (1976).  
 Rim and body fragments of bowls and pots.  
 MRT 7, 339–340, Site 35/15.
- 286. Tököl** (County Pest)  
 Stray finds.  
 Unpublished.  
*Kalicz* (1968) 79, Fo. 39.
- 287. Tököl–Dunapart** [Danube bank] (County Pest)  
 Stray find.  
 Small handled pot.  
 Unpublished. BHM, 1973.
- 288. Túrkeve area** (County Jász-Nagykun-Szolnok)  
 Settlement.  
 Field survey.  
*Csányi* (1992b) 22, 28, 31, 33.
- \*289. Űllő–Site 5** (County Pest)  
 Settlement.  
 Salvage excavation (ca. 400,000 m<sup>2</sup>, Klára Kővári, Róbert Patay, 2001–2005).  
 24 features in the southern part of the site. The finds included a hoard of clay moulds from Pit 5605.  
 Small fragments of interior decorated bowls (Pits 2037, 4079: *Kővári–Patay* [2005] Fig. 27. 1, Fig. 35. 8).  
*Kővári–Patay* (2005); *Kőrösi* (2005); *Batizi et al.* (2006).
- \*290. Vaszar–Szilos** (County Veszprém)  
 Settlement.  
 Field survey (1966).  
 Fragment of a bowl and pot rim fragments. Rim fragments of interior decorated bowls.  
 MRT 4, 256, Site 78/7, Pl. 4. 1–4; *Ilon* (1995) 133, Site 78/7, Pl. XXI. 13–14, Pl. XXII. 5.
- 291. Vác–Szék-hegy** (County Pest)  
 Settlement.  
 Field survey (1965, 1981).  
 Rim and body fragments of pots with brushed decoration.  
 MRT 9, 480–481, Site 31/51.
- \*292. Váckisújfalu** (County Pest)  
 Stray find.  
 A fragment of an interior decorated bowl is known from the Petrőczy Collection. HNM inv. no. 41/1951.  
 Unpublished.  
*Kalicz* (1968) 79, Fo. 30.



- 293. Vácrátót–Nagy-rét** (County Pest)  
 Settlement.  
 Field survey (1980's).  
 A few body fragments with brushed decoration.  
 MRT 9, 530, Site 35/28.
- 294. Vecsés–Site 54** (County Pest)  
 Settlement.  
 Salvage excavation (19,450 m<sup>2</sup>, Valéria Kulcsár, 2004).  
 Nine features: pits, ditches and an assemblage of four vessels.  
*Kulcsár* (2005); *idem* (2006) 57.
- 295. Vecsés–Site 56 (Ferihegy-dűlő)** (County Pest)  
 Settlement.  
 Salvage excavation (István Dinnyés, 1997).  
 Approximately 30 features.  
*Dinnyés* (2001) 77, Pl. 1.
- \*296. Vecsés–Site 83** (County Pest)  
 Settlement.  
 Salvage excavation (34,510 m<sup>2</sup>, Róbert Patay, Tibor Rácz, 2004).  
 10 features.  
 Fragments of interior decorated bowls. Unpublished.  
*Patay–Rácz* (2005); *idem* (2006) 63.
- 297. Velem** (County Vas)  
 Stray finds.  
 Two figurines. H. 14 cm, the other is smaller.  
*Mozsolics* (1945) 44, Abb. 1; *Kalicz* (1968) 80, Fo. 52, Taf. X. 5, 7.
- 298. Veresegyház–Álom-hegy** (County Pest)  
 Settlement.  
 Field survey (1977–1978).  
 A few body fragments with brushed decoration.  
 MRT 9, 553–555, Site 37/12.
- 299. Veresegyház–Ivacsok** (County Pest)  
 Settlement.  
 Field survey (Lajos Horváth, 1978–1984); small-scale rescue excavation (Károly Mesterházy, 1985).  
 Two pits and stray finds. The documentation of the features is incomplete and the finds are unpublished.  
 MRT 9, 549, Site 37/2, Pl. 13. 16–17.
- \*300. Veszprém–7 Kossuth Lajos Street** (County Veszprém)  
 Settlement.  
 Stray find (1914).  
 Round, hollow foot fragment of an interior decorated bowl.  
 MRT 2, 242, Site 51/35.
- 301. County Veszprém** (County Veszprém)  
 Stray finds.  
 Handled mug (H. 8 cm) and a small, handled pot with rib decoration (H. ca. 10.5 cm).  
*Kalicz* (1968) 83, Taf. X. 4, 6.
- \*302. Veszprémfajsz–Királyhegysarok** (County Veszprém)  
 Settlement.  
 Field survey (1965–1966).  
 Rim fragment of an interior decorated bowl.  
 MRT 2, 258, Site 52/4, Pl. 6. 15, 18.
- \*303. Vésztő–Pányád** (County Békés)  
 Settlement.  
 Field survey (1974).  
 Body fragment of an interior decorated bowl.  
 MRT 6, 201, Site 12/119, Pl. 24. 4.

**304. Vésztő–Hóta (County Békés)**

Field survey (1972, 1974).

MRT 6, 191, Site 12/47.

**305. Zsámbék–Mányi Road (County Pest)**

Settlement.

Field survey (1971).

Body and rim fragments of pots.

MRT 7, 355, Site 38/6.

## Slovakia

**\*306. Bajč (Bajcs)–Medzi kanálmi**

Settlement or cremation burial (?).

Rescue excavation (2650 m<sup>2</sup>, 1987).

An oval pit measuring 120 cm x 80 cm yielded five fragmented vessels (an amphora, two bowls, an interior decorated bowl and a pot). According to Ivan Cheben, the pit was a cremation burial (*Cheben* [1998] 150).

Čaplovič–Cheben–Ruttkay (1988) 39–40; *Cheben* (1998) 149–150, Obr. 1. 3, Obr. 4. 1–7.

**\*307. Bajč (Bajcs)–Vinohrady**

Settlement.

Small rescue excavation (J. Turbač, 1957).

32 pits. Only a selection of the finds has been published (from Features 7, 10, 50, 126), Mostly household pottery and fragments of interior decorated bowls with rectangular, hollow foot (*Vladár* [1966] 255, Abb. 7. 3–4, Abb. 33. 6).

*Vladár* (1966) 254–255, Abb. 7–10.

**\*308. Bánov (Bánkeszi)**

Settlement.

Rescue excavation (Juraj Pavúk, 1959).

Two pits. Only a selection of the finds has been published, mainly household pottery and fragments of interior decorated bowls (*Vladár* [1966] 255, Abb. 11. 5).

*Vladár* (1966) 255, Abb. 11. 1–7.

**309. Bíňa (Bény)–Co-operative parking**

Settlement.

Stray finds: a few body fragments with brushed decoration.

*Vladár* (1966) 255.

**310. Bohatá (Bagota)–Klempnerpart**

Settlement.

Stray finds: body fragments with rusticated surface.

*Novotný* (1955) 21–22; *Vladár* (1966) 255.

**311. Bohatá (Bagota)–Pálmajer**

Settlement.

Field survey (Alojz Habovštiak, 1957).

Body fragments of pots and jugs.

*Vladár* (1966) 255.

**\*312. Branč (Berencs)–Arkuš (earlier Lúky Gergelová)**

Stray finds.

Body fragments of two interior and exterior decorated bowls.

The site was first specified as Lúky Gergelová (*Willvonseder* [1939] 146, Abb. 7. 1–2; *Patay* [1940] 5, 10; *Novotný* [1955] 18, Obr. 8. 1, 5) and later as Ivanka pri Nitre (*ibidem* 18, Tab. VII. 6a–b). Since the publication of Jozef Vladár's seminal study, the site is known as Branč–Arkuš (*Vladár* [1966] 255, Abb. 33. 3–4; *idem* [1973] 92–92, Obr. 70. 1–2).

**\*313. Branč (Berencs)–Co-operative courtyard**

Settlement.

Excavation (15,000 m<sup>2</sup>, Jozef Vladár, 1961–62).



Makó–Kosiň–Čaka finds without a context were found during the excavation of a cemetery of the Nitra group: fragments of jugs, pots and interior decorated bowls.

*Vladár* (1964b) 79, 89, Obr. 41. 5, 7; *idem* (1966) 255, Abb. 33. 7; *idem* (1973) 92–93, Obr. 71. 3, 5.

**\*314. Bučany (Bucsány)–Šľachtiteľská stanica**

Settlement.

Pit.

Fragment of an interior decorated bowl and a bowl fragment.

*Bujna–Romsauer* (1980) Obr. 27. 8, 11, 13.

**\*315. Čaka (Cseke)–Diely medzi lúkami**

Settlement.

Excavations (ca. 200,000 m<sup>2</sup>; Anton Točík, 1950; Jozef Paulík and Titus Kolník, 1959–60; Jozef Vladár, 1961).

At least five pits and a dwelling pit (Feature 8/59) were unearthed, yielding a rich assortment of finds, such as the assemblage from Feature 6/61.

Fragments of interior decorated bowls (Features 3/61, 6/61).

*Točík* (1951); *Novotný* (1955) 16, Obr. 5. 1–3, 5–9, Tab. VI. 1–18; *Vladár* (1962); *idem* (1966) 255–256, Abb. 13–15; *Pavúk–Šiška* (1971) 351–354, Obr. 19. 7–9.

**\*316. Čaka (Cseke)–Kopec**

Three cremation burials and unstratified finds.

Excavation (1950).

Three cremation burials (Graves 4, 5, 8: *Točík–Paulík* [1960] 59, 61, 83, Obr. 4) came to light under a Late Bronze Age tumulus, Early Bronze Age finds were recovered from the fill of the tumulus as well. Graves 5 and 8 lay 7 m apart from each other in the southern part of the tumulus, while Grave 4 was located in the northern part, 20 m from the previous two (*Benkovský–Pivovárová* [2007] 136).

Grave 4: inurned burial with a two-handled amphora (*Točík* [1951] 160, 171, Obr. 128. 1; *Novotný* [1955] 16, Tab. VIII. 3; *Točík–Paulík* [1960] 59, 83, Obr. 4. 4, Tab. I. 1; *Vladár* [1966] 267, 269, Abb. 24).

Grave 5: cremation burial. Grave goods: a handled jug (H. 24.5 cm) and a bowl. Ashes were found both in the jug and in a heap in a smaller pit (30 cm x 35 cm) beside the vessels (*Novotný* [1955] Obr. 5. 4, Tab. VIII. 2; *Točík–Paulík* [1960] 59, 83, Obr. 4. 5, Obr. 23, Tab. I. 2–3; *Vladár* [1966] 267, 269, Abb. 25).

Grave 8: scattered cremation burial (100 cm x 125 cm). Grave goods: one jug, two smaller mugs (H. 10 cm) and an interior decorated footed bowl (H. 8 cm) (*Točík* [1951] 160, 171, Obr. 128. 2; *Knor* [1952] 394, Obr. 207; *Novotný* [1955] Obr. 4, Tab. VIII. 1a–b, 4, 5, *Točík–Paulík* [1960] 59, 83, Obr. 4. 8, Tab. I. 4–7a–b; *Vladár* [1966] 267, 269, Abb. 26, Abb. 32).

Unstratified finds from the fill of the tumulus (*Točík–Paulík* [1960] 66–67, 69, Obr. 9. 1a–b, Obr. 10. 1, 3–4).

Deposited in Grave 8 was a bowl with rectangular, hollow foot with an interior decoration of hatched lozenges in a chequerboard pattern (*Knor* [1952] 394, Obr. 207. 4a–b; *Novotný* [1955] Obr. 4, Tab. VIII. 1a–b; *Točík–Paulík* [1960] 83, Tab. I. 7a–b).

The fill of the tumulus yielded several fragments of interior decorated bowls:

1. Fragments of the lower parts of four bowls with rectangular, hollow foot (*Novotný* [1955] 16, Obr. 6. 7–8, Obr. 7. 1–4; *Točík–Paulík* [1960] 66, Obr. 9. 1a–b, Tab. III. 10).

2. Twelve rim fragments with interior decoration of hatched lozenges in a chequerboard pattern (*Novotný* [1955] 16, Obr. 13. 1–8; *Točík–Paulík* [1960] 66–67, Tab. III. 1–9, 11).

*Točík* (1951) 158–160, 171, Obr. 128; *Knor* (1952) 394, Abb. 207; *Novotný* (1955) 16, Obr. 4, Obr. 5. 4, Obr. 6. 7, 8, Obr. 7. 1–4, Obr. 13. 1–8, Tab. VIII. 1–5; *Točík–Paulík* (1960) 59, 66, 67, 83, 98–100, Obr. 4, Obr. 9. 1a–b, Obr. 10. 1, 3, 4, Obr. 23, Taf. I, Taf. II. 1–6, 8, Taf. III; *Vladár* (1966) 267, Abb. 24–26, Abb. 32.

**317. Dedinka (Fajkürt)–Jelení kút**

Unstratified finds.

Excavation (1974).

Makó–Kosiň–Čaka pottery fragments were found during the excavation of a Late Bronze Age tumulus.

*Paulík* (1983) 33.

**318. Devínska Nová Ves (Dévényújfalú)**

Stray find.

*Eisner* (1933) 56, Tab. XXVII. 2; *Nevizánsky* (2001) 27.

**319. Dlhá nad Váhom (Vághosszúfalú)–Vinohrady**

Settlement.

Excavation (Andrej Rajnič, 1956).

Two pits.

*Vladár* (1966) 256.

**320. Dolná Streda (Alsószerdahely)–Vršky**

Settlement.

Excavation (Juraj Bárta, 1955).

Three pits with a few finds (Pits 1, 2, 5).

*Bárta-Pavúk* (1959) 482, 485–486; *Vladár* (1966) 256.

**321. Dudince (Gyúgy)**

Settlement.

Excavation (Vojtech Budinský-Krička).

Unstratified vessel fragments.

*Vladár* (1966) 256.

**\*322. Dunajská Lužná (Dénese)–Nové Košariska (Misérd), Mohyla VI**

Settlement.

Excavation.

Pit (200 cm x 160 cm) under the Late Bronze Age tumulus. A fragment of an interior and exterior decorated bowl among the pottery fragments.

*Pichlerová* (1976) 8–11, Obr. 3.

**\*323. Dvory nad Žitavou (Udvard)–Co-operative courtyard**

Settlement.

Field survey (Jozef Paulík, 1958).

Makó–Kosihy–Čaka pottery finds (rim fragment of an interior decorated bowl (*Vladár* [1966] 256, Abb. 16. 1–2), pot fragments with rusticated surface and a fragment of a stone axe lay in a secondary position in a ditch of the Velatice culture.

*Vladár* (1966) 256, Abb. 16.

**\*324. Gbelce (Köbölkút)–Pieskovňa**

Settlement.

Field survey (2000).

Traces of at least three pits were identified: fragments of pots, bowls and interior decorated bowls.

*Kuzma* (2001) Obr. 59. 1–10, Obr. 60. 1.

**\*325. Hronovce–Vozokany nad Hronom (Garamvezekény)**

Stray find.

Body fragment of an interior decorated bowl.

*Novotný* (1955) 21, Obr. 2. 7; *Vladár* (1966) 259.

**\*326. Hurbanovo (Ógyalla)–Bacherov majer**

Unstratified finds.

Excavation (1952).

In 1952, during the excavation of the Early Bronze Age cemetery, unstratified finds of the Makó–Kosihy–Čaka culture came to light from the top-soil, among them the body fragment of an interior decorated bowl.

*Novotný* (1955) 18, Abb. 8. 3, 7; *Vladár* (1966) 256; *Burger* (1980) 30, Fo. 36a.

**\*327. Hurbanovo (Ógyalla)–sandmine**

Settlement.

Excavation (Jozef Paulík, 1957).

Six round pits (Diam. 120–210 cm). Household pottery, fragments of interior decorated bowls (Pits 3/57, 6/57) and stone tools.

*Paulík* (1958) 481–487, Obr. 177, Obr. 184; *Vladár* (1966) 256.



**\*328. Chotín (Hetény)–Simítós**

Settlement?

Excavation (Jozef Paulík, 1956–57).

Finds in a secondary position from Grave 138 of the Velatice cemetery.

Other unstratified finds included the fragment of an interior decorated bowl with rectangular foot (Grave 138) and a fragment of an exterior and interior decorated bowl.

*Vladár* (1966) 256, Abb. 33. 8.

**329. Imeľ (Imely)–Betyárpusztá**

Stray finds.

Field survey.

The finds perished during World War 2.

*Novotný* (1955) 18; *Vladár* (1966) 257.

**\*330. Ivanka pri Dunaji (Pozsonyivánka)**

Burial (mixed cremation).

Small-scale rescue excavation (Magda Pichlerová, 1961).

Grave goods: small, handled jug (H. 10 cm) and an interior decorated bowl. Ashes were found in the jug.

*Vladár* (1966) 267, Abb. 27. 1–2, Abb. 33. 5.

**\*331. Ivanka pri Nitre (Nyitraivánka)**

Inhumation burial and unstratified finds.

Small-scale rescue excavation (J. Rajčák, 1957).

Two vessels were found in the shallow grave pit, beside the pelvis of the east to west oriented skeleton lying extended on the back.

The findspot of an interior decorated bowl was specified as a site with an identical name (*Novotný* [1955] Tab. VII. 6a–b). Cp. cat. no 312. Branč–Arkuš

*Vladár* (1966) 267, 268, Abb. 28. 1–2.

**332. Jelšovce (Nyitraegerszeg)–hospodársky dvor JRD**

Settlement.

Excavation (Jozef Bátora, 1983).

Several pits. The finds of Feature 1 are known only from a description without illustrations.

*Bátora* (1984) 30; *idem* (1989a) 208.

**333. Jelšovce (Nyitraegerszeg)–Dolné Funduše**

Settlement.

Small-scale rescue excavation (gas pipeline, 2004).

A few features.

*Bisták–Daňo–Poláček* (2006).

**334. Jelšovce (Nyitraegerszeg)–Medzi cestami**

Settlement.

Field survey (1997).

Pot fragment.

*Hanuliak* (1999) 49, Obr. 28. 15.

**335. Kamenica nad Hronom (Garamkövesd)–Co-operative**

Settlement.

Small-scale rescue excavation (J. Rajčák).

One pit. Several other pits were destroyed. A pot and a small, handled pot were in the pit.

*Vladár* (1966) 257, Abb. 17. 1–2.

**\*336. Kamenín (Kéménd)**

Stray find.

Fragment of an interior decorated bowl.

*Willvonseder* (1939) 141, Abb. 5; *Patay* (1940) 5; *Novotný* (1955) 18, Obr. 2. 5; *Vladár* (1966) 257; *Burger* (1980) 30, Fo. 39.

**\*337. Kamenín (Kéménd)–Kiskukoricás**

Settlement.

Excavation (1350 m<sup>2</sup>, Gabriel Nevizánsky, 1977–78).

One larger feature (Feature 26/77: 5.5 m x 2.2 m).

Fragments of interior decorated bowls (*Nevizánsky* [2001] Pl. I. 1–8).  
*Nevizánsky* (1978); *idem* (2001).

**\*338. Krásno (Őszéplak)–Kráčiny**

Two burials.

Small-scale rescue excavation (1956).

In 1956, two stone ringed burials (without human remains or ashes) were identified 50 m apart.

Grave 1: body fragment with brushed decoration and fragment of an interior decorated bowl (*Vladár* [1966] 267–268, Abb. 29).

Grave 2: no grave goods (*Vladár* [1966] 267–268).

*Vladár* (1966) 267–268, Abb. 29. 1–7. cp. *Benkovsky-Pivovárová* (2007) 136.

**\*339. Láb (Láb)–Pálenice**

Settlement.

Field survey.

Fragments of interior decorated bowls and pots.

*Drahošová* (1992) 28, Obr. 8. 9–11.

**\*340. Levice (Léva)–Alsó rétek**

Settlement.

Rescue excavation (*Vojtech Budinský-Krička*).

Two pits. Only a selection of the finds was published from the two pits (Pits 11 and 15): fragments of pots and bowls, and a fragment of an interior decorated footed bowl with a chequerboard pattern.

*Budinský-Krička* (1950) 157; *Novotný* (1955) 18–19, Obr. 10. 1, 2, 5; *Vladár* (1966) 257.

**341. Lozorno (Lozorno)–Široké diely**

Settlement.

Excavation (approximately 2300 m<sup>2</sup>, 2000).

A pit (Feature 45) and six post-holes. The figure-of-eight shaped pit yielded a rich assortment of finds.

*Elschek-Varsik* (2001) Obr. 27. 6–11, Obr. 29. 1–3.

**\*342. Lužianky (Sarlóskajsa)–Kajsa**

Settlement.

Rescue excavation (*Peter Milo*, 2001).

Partially excavated pit. A layer of vessels (pot, bowl and interior decorated bowl fragments) overlay a layer of cattle bones in the pit.

Interior decorated bowl (*Milo* [2002] Fig. 92. 5).

*Milo* (2002).

**\*343. Malé Kosihy (Ipolykiskesz)–Törökdomb and Papföld**

Settlement.

Excavation (*Anton Točík*, Törökdomb: 1956, Törökdomb, Papföld: 1968–69).

Törökdomb (stratified settlement): two pits (Pits 11, 15) in Horizon II and unstratified finds from other layers as well (*Točík* [1981b] 12–18, 25, 42, 82, Tab. V. 1, Tab. VII. 23–30, Tab. VIII. 1–22, Tab. IX. 1–17, Tab. X. 1–15, Tab. XIV. 11, Tab. XX. 19).

Papföld: finds from two features (Features 30 (?) and 31) (*ibidem* 153, 170, 172–174, 193, Obr. 4. 6, Obr. 5. 2, Obr. 9. 3, 4, Obr. 23. 1–15, Obr. 24. 1–14, Obr. 25. 1–11, Obr. 44. 3–4, 6).

Fragments of interior decorated bowls (*Točík* [1961a] Abb. 6. 10, 11, 12–13).

*Točík* (1961a); *Vladár* (1966) 257, Abb. 12; *Točík* (1981b).

**\*344. Malé Vozokany (Kisvezekény)–Nové Vozokany (Nagyvezekény)**

Stray find.

Botka Collection.

Rim fragment of an interior decorated bowl.

*Bátora* (1983b) 359, 362, Obr. 5. 6.

**345. Maňa (Nagymánya)–Gedra**

Settlement.

Small rescue excavation (*Blažej Beňadik*).

Unstratified finds: body fragments with brushed decoration.

*Novotný* (1955) 20; *Vladár* (1966) 257.



**\*346. Mužla (Muzsla)–Čenkov-Vilmakert and Orechovy sad**

Settlement.

Stray finds and excavation (Jiří Hrala, Václav Moucha, 1952; control excavation, 1953).

Seven pits and stray finds:

Stray finds: *Eisner* (1933) 13, 16, 32–34, Tab. XVI. 3, 5–6.

Orechovy sad: five pits (1952).

In 1953, during the control excavation in the vicinity of the site, two pits and unstratified finds were unearthed.

Fragments of interior decorated bowls.

*Novotný* (1955) 16–18, Obr. 9. 1–10, Obr. 10. 4, 7–9, 11–12, Tab. V. 1–7; *Vladár* (1966) 257, Abb. 18; Abb. 33. 1–2.

**\*a. Mužla (Muzsla)–Čenkov-Vilmakert and Orechovy sad**

Settlement.

Salvage excavations (Gabčíkovo–Nagymaros dam, 1979–1990, 1992, 1996).

Sites located directly on the bank of the Danube, currently divided in two by a road. A total of 43 (*Kuzma* [1993] 74) and 25 pits were reported from the two settlement parts (*Cheben* [1998] 150).

A selection of the finds, including a metal pin and fragments of interior decorated bowls, was published.

According to the reports, the finds can be assigned to the late Makó–Kosihiy–Čaka culture and they reflect contact with the Nagyrév and Somogyvár–Vinkovci cultures.

*Kuzma–Bátora* (1981) 153, Obr. 81. 7, Obr. 86. 3, Obr. 86. 6–8; *Kuzma* (1982) 172, Obr. 101. 2, 4–5; *Kuzma–Ožd'áni–Hanuliak* (1983) 144; *Kuzma–Šalkovský* (1986) 137; *Hanuliak–Kuzma* (1990) 59; *Kuzma–Hanuliak* (1990) 119, 122, Abb. 1, Abb. 4. 1–7; *Hanuliak–Kuzma* (1991) 35; *Kuzma* (1992) 61; *idem* (1993); *idem* (1998).

**347. Mužla (Muzsla)–Svätajurský vnútorný hon**

Settlement.

Field survey.

Body fragment of a pot.

*Cheben–Kuzma–Rajtár* (1982) 100, Obr. 75. 19.

**\*348. Nesvady (Naszvad)–Pethágó**

Stray find.

Body fragment of an interior decorated bowl.

*Patay* (1940) 5, 10, Taf. I. 3; *Novotný* (1955) 19, Taf. VII. 7; *Vladár* (1966) 257.

**349. Nesvady (Naszvad)–Rókalyuk**

Stray finds.

Field survey.

The finds perished during World War 2.

*Vladár* (1966) 258.

**\*350. Nevidzany (Néved)–Konopiská**

Settlement.

Field survey.

Rim fragments of a pot and an interior decorated bowl.

*Bátora* (1975a) 21, Obr. 4.

**351. Nevidzany (Néved)**

Stray find (1967).

Broken clay mould for a Stublo type axe.

*Bátora* (1982b).

**352. Nitra (Nyitra)–Mikov dvor**

Settlement.

Excavation (1984).

Pit.

*Chropovský–Fusek* (1985).

**353. Nitra (Nyitra)–Mosoda**

Stray finds (settlement?).

The household pottery fragments found in the disturbed area suggest a settlement. Unpublished.

*Vladár* (1966) 258.

**354. Nitra–Dolné Krškany (Nyitra–Alsóköröskény)—Co-operative**

Settlement.

Stray finds.

A few body fragments with brushed decoration.

*Vladár* (1966) 256.

**355. Nitra–Dolné Krškany (Nyitra–Alsóköröskény)—Plastics factory**

Settlement.

Excavation (1962).

Vessel fragments.

*Vladár* (1966) 256.

**356. Nitra–Dolné Krškany (Nyitra–Alsóköröskény)—záhrada domu č. 33**

Settlement.

Small-scale rescue excavation (1977).

Partially excavated pit. Fragments of pots and bowls.

*Bátora* (1978) Obr. 5.

**357. Nitra–Dolné Krškany (Nyitra–Alsóköröskény)—6 Látečková Street**

Settlement (?).

Small-scale rescue excavation (1994).

Two Somogyvár-like jugs and a pot (H. 50 cm) were reported.

*Marková* (1995).

**\*358. Nitra (Nyitra)—Kynek**

Stray find.

Fragment of an interior decorated bowl.

*Ruttkay* (1985b) 211, Obr. 78. 1.

**359. Nitriansky Hrádok (Kisvárad)—Vysoký**

Settlement.

Excavation.

Household pottery fragments without a context.

*Novotný* (1955) 19–20; *Vladár* (1966) 258.

**\*360. Nitriansky Hrádok (Kisvárad)—Zámeček**

Settlement.

Excavation (Anton Točík, 1957–1960).

Three pits: a larger (L. 525 cm), oval pit interpreted as a house and two other pits (Sectors D/3/2 and G/5/2), as well as unstratified finds.

Fragments of interior decorated bowls and fragments of bowls with rectangular, hollow foot. Unpublished finds, known only from descriptions without illustrations.

*Novotný* (1955) 19; *Vladár* (1966) 258; *Točík* (1981a) 25–26.

**\*361. Nové Zámky (Érsekújvár)**

Settlement.

Rescue excavation (1200 m<sup>2</sup>, Jozef Vladár, 1963).

12 pits. One of the pits was a larger “pit house” (Feature 10) with several post-holes.

Fragments of interior decorated bowls with rectangular foot (*Vladár* [1966] 258, Abb. 21. 8, 9).

*Vladár* (1966) 255–256, 258, 263, 266, Abb. 3–6, Abb. 19–22.

**\*362. Patince (Pátpusztá)—Danube bank**

Settlement.

Rescue excavation (1981–1982).

A pit and unstratified finds.

Rim fragment of an exterior, interior and rim decorated bowl. This fragment was earlier assigned to the Kostolac group, cp. *Cheben* (1987) 306.

*Cheben* (1982) 93, Obr. 67. 5; *idem* (1987) 310, Obr. 3. 3–5; *idem* (1998) 149, Obr. 1. 1, Obr. 2. 1–2, Obr. 4. 8.

**363. Patince (Pátpusztá)—Teplica**

Settlement.

Excavations (1981, 1983).



- A pit (Pit 27) and unstratified finds.  
*Cheben* (1984); *idem* (1998) 149, Obr. 1. 2, Obr. 3. 1–8.
- \*364. Pečenice (Hontbesenyőd)–Vtáčník Hill**  
 Stray find.  
 Body fragment of an interior decorated bowl.  
*Novotný* (1955) 20, Taf. VII. 2; *Vladár* (1966) 258.
- 365. Pezinok (Bazin)–Lazárna**  
 Settlement.  
 Small-scale rescue excavation (1983).  
 Pit (Pit 2/83).  
*Farkaš* (1984) 73, Obr. 33. 20.
- 366. Santovka (Szántó)–Malinovec**  
 Settlement.  
 Unstratified finds.  
*Vladár* (1966) 258, Abb. 23. 1, 3.
- 367. Skalica (Szakolca)–Štvrte u Starých šibeníc**  
 Settlement.  
 Excavation (approximately 5000 m<sup>2</sup>, 2003).  
 Three Makó–Kosihy–Čaka pits (Pits 11, 14, 15) were unearthed on the settlement of the Bell Beaker culture.  
*Cheben–Drahošová* (2004).
- \*368. Sládkovičovo (Magyardiószeg)**  
 Settlement.  
 Rescue excavation (1966–1967).  
 Five pits and unstratified finds.  
 Fragment of an interior decorated bowl with rectangular foot. Unpublished.  
*Vladár* (1966) 259; *idem* (1969) Obr. 3, Obr. 5–12.
- 369. Šal'a (Vágsellye)–Chemické závody**  
 Scattered cremation burial.  
 Rescue excavation (Anton Točík, 1963).  
 The burial contained a large amphora and a copper tool. The ashes lay near the amphora.  
*Vladár* (1966) 268, Abb. 30. 1–2; *Págo* (1967); *Vladár* (1967); *Schalk* (1998) 82, Taf. 15. 3.
- \*370. Šarovce (Nagysáró)–Former brick factory**  
 Settlement.  
 Excavation (Bohuslav Novotný, 1953–1954).  
 A pit and unstratified finds.  
 Fragments of interior decorated bowls and a fragment of a rectangular foot among the finds.  
*Novotný* (1955) 20, Taf. VII. 3–5; *Vladár* (1966) 259.
- \*371. Šarovce (Nagysáró)–Makóczadomb**  
 Stray find.  
 Body fragment of an interior and exterior decorated bowl.  
*Novotný* (1955) 20, Obr. 8. 6; *Vladár* (1966) 259.
- \*372. Tesárske Mlyňany (Barstaszár)–Gočol**  
 Settlement.  
 Salvage excavation (9100 m<sup>2</sup>, Jaroslava Ruttkayová, 1984).  
 18 pits. Only a selection of the finds has been published (fragments of bowls, pots and interior decorated bowls). Jozef Bátora also mentions a tuyère (*Bátora* [1989b] 12).  
*Ruttkayová* (1985) Obr. 80–81.
- \*373. Tlmače (Garamtolmács)**  
 Unstratified finds.  
 Small-scale rescue excavation (Anton Točík).  
 Several pottery fragments (pots, bowls and others) and a fragment of an interior decorated bowl were published.  
*Novotný* (1955) 20, Obr. 10. 3, 6; *Vladár* (1966) 259.

**374. Veľký Meder (Nagymegyer)–Vámostelek**

Settlement.

Excavation (1989).

Three pits. The finds of Pit 26/89, including the clay mould of a shaft-hole axe, were published; the rest of the finds are unpublished.

*Hromada–Varsik* (1994).

**\*375. Vráble (Verebély)–Fidvár (Földvár)**

Settlement.

Excavation (1967).

Two pits and unstratified finds.

Rim and body fragments of interior decorated bowl; fragment of a round, hollow foot.

*Točík* (1986) 463, 466, Obr. 4. 2, 4–9, 11–16.

**\*376. Záhorská Ves (Magyarfalu)–Príbrzí**

Stray find.

Field survey (1956).

Rim fragment of an interior decorated bowl.

*Vladár* (1966) 259, Abb. 33. 9.

**377. Zbrojníky (Felsőfegyvernek)–Co-operative**

Settlement.

Small-scale rescue excavation (1956).

Unstratified finds: household pottery fragments.

*Novotná* (1958) 301–302, 349, Obr. 126. 7–8; *Vladár* (1966) 259.

**\*378. Žitavany (Zsitvakenéz)–Pohronský Inovec**

Settlement.

Field survey (1974).

Rim fragment of an interior decorated bowl.

*Bátora* (1975b) Obr. 5. 1.

**Austria**

**\*379. Bad–Deutsch Altenburg (Lower Austria)**

Stray finds (Wadler Collection).

Two fragments of interior decorated bowls.

*Ruttkay* (1973) 42, T. 6. 12–13; *idem* (1983) T. 29. 1; *idem* (1985a) T. 29. 1; *idem* (1995b) 199.

**\*380. Breitenbrunn (Burgenland)**

Stray find.

Body fragment of an exterior and interior decorated bowl.

*Ohrenberger* (1961) 1, Taf. I. 1; *Ruttkay* (1995b) 199.

**381. Eggendorf am Wagram (Lower Austria)**

Stray finds.

Elisabeth Ruttkay mentioned finds of the Makó–Kosihy–Čaka culture in the collection of the Naturhistorisches Museum in Vienna. NHM PA inv. no. 71.224, 71.228, 71.230, 71.231. Unpublished.

*Ruttkay* (1982) 156, Abb. 70. 2; *idem* (1983) T. 29. 2; *idem* (1985a) T. 29. 2; *idem* (1995b) 199.

**382–383. Grub an der March–Unterhaspel-North and South (Lower Austria)**

A road divides Plot 364/3 of the Unterhaspel ridge. The northern and southern section of the probably same site are sometimes referred to as Unterhaspel-North and Unterhaspel-South.

**382. Grub an der March–Unterhaspel-North (Lower Austria)**

Settlement.

Stray finds (suggesting a settlement).

Rim fragments of pots.

*Leeb* (1990a) 180, Abb. 156–158.

**\*383. Grub an der March–Unterhaspel-South (Lower Austria)**

Settlement.

Field survey and salvage excavation (Gottfried Artner, 1991–1992).



- Field survey: rim fragment of a pot and a body fragment of an interior decorated bowl (*Leeb* [1990c] 193, Abb. 382).
- Excavation: The few, still unpublished features contained pottery fragments, amongst them the fragment of an exterior and interior decorated bowl (*Leeb* [1991] 31).
- Stuppner* (1985–1986) Abb. 84–85; *Leeb* (1990b) 181, Abb. 170–171, Abb. 180–181; *idem* (1990c) 193, Abb. 381–382; *idem* (1991) 31; *Ruttkay* (1995a) 353–354; *idem* (1995b) 196, 199; *Krenn-Leeb* (1996).
- 384. Hohenau an der March–Föhrenhügel** (Lower Austria)
- Stray finds.
- Stray finds of the Makó–Kosihiy–Čaka culture were also found in addition to a child burial of the Mödling–Zöbing/Jevišovice culture.
- Ruttkay* (1973) 42; *idem* (1982) Abb. 70. 3; *idem* (1983) T. 29. 3; *idem* (1985a) T. 29. 3; *idem* (1995b) 199.
- 385. Jois (Nyulas)** (Burgenland)
- Stray finds.
- Elisabeth Ruttkay mentioned finds of the Makó–Kosihiy–Čaka culture in the collection of the Naturhistorisches Museum in Vienna. NHM PA inv. no. 68 129, 68 130.
- Ruttkay* (1995b) 199.
- \*386. Jois (Nyulas)–Teufelsjoch** (Burgenland)
- Stray find.
- Pottery fragments found in the fill of a Bronze Age burial (Alexander Seracsin, 1930).
- Fragments of interior decorated bowls.
- Willvonseder* (1940) 14–15, Taf. II. 8.
- 387. Kaisersteinbruch (Császárkőbánya)–Aufeld** (Burgenland)
- Stray find.
- Rim fragment of a pot.
- Winter* (1984) 223, Abb. 8.
- 388. Mannersdorf am Leithagebirge** (Lower Austria)
- Stray finds.
- Unpublished finds. NHM PA inv. no. 54.889.
- Ruttkay* (1982) 156, Abb. 70. 4; *idem* (1983) T. 29. 4; *idem* (1985a) T. 29. 4; *idem* (1995b) 199.
- \*389. Matzleinsdorf–Burgstalläcker** (Lower Austria)
- Stray find.
- Field survey.
- Rim fragment of an interior decorated bowl.
- Harrer–Ruttkay* (1990) 183, Abb. 216; *Ruttkay* (1995b) 194, 199.
- 390. Obersulz–Wartberg** (Lower Austria)
- Stray finds.
- A few stray pottery fragments found in a secondary position from larger pits (Pits 6 and 7) of the Urnfield culture.
- Schwammenhöfer* (1980) 347, 350; *Ruttkay* (1982) 156, Abb. 70. 5; *idem* (1983) T. 29. 5; *idem* (1985a) T. 29. 5; *Schwammenhöfer* (1988) 99–101, Taf. 1, Taf. 2, Taf. 6–11; *Ruttkay* (1995b) 199.
- 391. Schleinbach–Ziegelei** (Lower Austria)
- Settlement.
- Excavation (Hermann Schwammenhöfer, 1981).
- Three (or four) pits (Pits 44, 47, 48, 50) lying near each other and unstratified finds.
- Ruttkay* (1982) 143–144, 156, Abb. 50–64, Abb. 70; *idem* (1983) T. 29. 6; *idem* (1985a) T. 29. 6; *Schwammenhöfer* (1988) 99, 101–102, Taf. 3–5, Taf. 12–18; *Pucher* (1995); *Ruttkay* (1995b) 196, 198, 199, Abb. 31. 3–4.
- \*392. Schwechat–Bierkeller** (Lower Austria)
- Stray finds.
- Several pottery fragments, amongst them of an interior decorated bowl, fragment of a round, hollow foot and nine pot and bowl rim fragments were found in 1879.

*Ruttkay* (1973) 43, Taf. 5. 4–5, 7, Taf. 6. 6–11; *idem* (1982) 144, Abb. 38, Abb. 66–68; *idem* (1983) T. 29. 7; *idem* (1985a) T. 29. 7; *idem* (1995a) 354 (findspot specified as “Bierkeller” for the first time).

**393. Schwechat–Brauerei** (Lower Austria)

Cremation burial (?).

Five vessels (two bowls, two cups and a small handled pot) found in the early 20th century were most likely the grave goods of a cremation burial.

*Ruttkay* (1995a); *idem* (1995b) 199, Abb. 32. 3–7.

**\*394. Schwechat–Ölraffinerie** (Lower Austria)

Settlement.

Rescue excavation (1958–1959).

Makó–Kosihy–Čaka vessel fragments (two interior decorated bowl rim and body fragments, four pot rim fragments and two bowl fragments) lay in secondary position in Pit 6 dating from the Neolithic.

*Ruttkay* (1971) 29, Abb. 15, Abb. 17. 13–15; *idem* (1973) 43, T. 5. 1–5, 7, T. 6. 1–11; *idem* (1982) 14, Abb. 70. 7; *idem* (1983) T. 29. 7; *idem* (1985a) T. 29. 7; *idem* (1995b) 199, Abb. 31. 5.

**395. Siegendorf (Cinfalva)** (Burgenland)

Settlement.

Excavation (Karl Kaus, 1993).

Settlement with several closed features. Unpublished.

*Ruttkay* (1995a) 353; *idem* (1995b) 196, 199.

**\*396. Sommerein–“Kurzen Ellen”** (Lower Austria)

Settlement.

Small-scale rescue excavation (1975).

Makó–Kosihy–Čaka vessel fragments (fragments of an interior decorated bowl with rectangular foot, bowl and pot rim fragments, flask fragments and clay foot fragment).

*Ruttkay* (1975) 59–60, Abb. 45–52; *idem* (1982) 143, Abb. 1–37, Abb. 39–49, Abb. 70; *idem* (1983) T. 29. 8; *idem* (1985a) T. 29. 8; *idem* (1995b) 199, Abb. 31. 1, 2, 6–14.

**\*397. Wien, XXII–Aspern “Weber”**

Settlement.

Excavation and stray finds.

The Mödling/Zöbing–Jevišovice layer was overlain by a Makó–Kosihy–Čaka layer, the latter yielding fragments of interior decorated bowls, fragment of a bowl and rim fragments of pots.

The cultural classification of the interior decorated bowl is uncertain (*Kastner* [1939] Abb. 5–6; *Ruttkay* [1973] T. 1. 1). Fragments of interior decorated bowls with uncertain dates are known from three other sites in the Wien–Aspern area (cp. Wien–Aspern, Binder garden, Wien–Aspern-Plot 639/I).

*Kastner* (1939) 122–123, 125, Abb. 2, Abb. 3. 1–2, Abb. 4. 1–2, Abb. 5–6; *Willvonseder* (1940) 17, Taf. I. 1–2; *Pittioni* (1954) 238, Abb. 162; *Ruttkay* (1973) 39–41, T. 1. 1, T. 2. 1–3, 5–7; *idem* (1983) T. 29. 9; *idem* (1985a) T. 29. 9; *idem* (1995b) 199.

**\*398. Ziersdorf** (Lower Austria)

Settlement.

Small-scale rescue excavation.

Pit. Characteristic Makó–Kosihy–Čaka bowls decorated with a crescentic rib; fragments of an interior decorated bowl with round, hollow foot and a Somogyvár–Vinkovci type small mug.

*Hasenhündl* (1997) 771, Abb. 393–399.

## Czech Republic (Moravia)

**399. Bratčice area (Dezort Collection) and Bratčice–Sandmine**

Settlement.

Stray finds and small-scale rescue excavation (Anna Medunová-Benešová, 1954).

The stray finds are from the J. Dezort (Židlochovice) Collection (*Medunová-Benešová* [1981a] 98, Abb. 1. 3, Abb. 3. 1–3).



An almost rectangular feature (Feature 1: 810 cm x 700 cm, D. 50–100 cm) with the remains of an oval oven (1954), yielding a small number of finds, amongst them pottery fragments of the Bell Beaker culture (*Medunová-Benešová* [1981a] 100, Abb. 2. 9, 12).

*Benešová* (1957) 21–23, Obr. 1; *Medunová-Benešová* (1981a) 99–100, Abb. 2. 8–18, Abb. 4b; *Stuchlík–Stuchlíková* (1996) Obr. 45.

#### **400. Hulín**

Settlement.

Excavation.

Pit (Feature 12).

*Spurný* (1959) 113–121; *Dohnal* (1973) 4; *Medunová-Benešová* (1981a) 97, Abb. 1. 1; *Stuchlík–Stuchlíková* (1996) Obr. 45.

#### **401. Miškovice**

Settlement.

Small-scale rescue excavation (Vít Dohnal, 1967).

Pit and unsratified finds.

*Dohnal* (1968) 18, Tab. 17. 1–3; *idem* (1973) 3–4, Obr. 1. 1–11; *Medunová-Benešová* (1981a) 97, Abb. 1. 2; *Pavelčík* (1981) 158, Taf. III. 2–4, Taf. IV. 2–4; *Stuchlík–Stuchlíková* (1996) Obr. 45.

#### **402. Mištrín**

Vessel find (?).

*Peška* (2001) 139.

#### **403. Moravská Nová Ves–Hrušky**

Scattered cremation burial.

The single grave good was an amphora. Ashes of an adult male.

*Stuchlík–Stuchlíková* (1996) 4, 150, Obr. 13. 2, Obr. 27, Tab. I. 3, Tab. VII. 9.

#### **404. Mušov–gravel pit**

Unstratified finds.

Excavation (Stanislav Stuchlík, 1976).

Pot and bowl rim fragments were recovered from the fill of Aunjetitz burials.

*Medunová-Benešová* (1981a) 100, Abb. 2. 3–7.

#### **405. Mušov–U Sv. Jana**

Settlement/or burial?

A pot and a bowl recovered from a pit.

*Stuchlíková–Stuchlík* (1989) 187; *idem* (1996) Obr. 45; *Peška–Rakovský* (1992); *Šebela* (1999a).

#### **406. Prušánky**

Settlement (?).

Kind personal communication of Zdeněk Klanica and Ivo Rakovský.

*Stuchlíková–Stuchlík* (1989) 187; *idem* (1996) Obr. 45. 6.

#### **\*407. Přitluky–Fraumühle**

Settlement.

Small-scale rescue excavation (1954).

The unstratified finds included the rim and base fragment of two smaller, interior decorated bowls. Finds of the Bell Beaker culture were also unearthed.

*Medunová* (1970); *Medunová-Benešová* (1981a) 97–98, Abb. 1. 5, Abb. 2. 1–2; *Stuchlík–Stuchlíková* (1996) Obr. 45.

#### **408. Strachotín–gravel pit**

Settlement.

Excavation.

Six features, four of them resembling a house. Three of the four house-like features were N–S oriented and rectangular (4 m x 2 m), while the fourth was larger (7.4 x 3.1 m) and NW–SE oriented.

*Stuchlík–Stuchlíková* (1996) Obr. 45. 8. *Peška–Rakovský* (1992); *Šebela* (1999a).

#### **409. Velké Pavlovice**

Settlement.

Excavations (Jana Stuchlíková, Stanislav Stuchlík, 1980).

Four pits. Only a selection of the finds has been published.

*Stuchlíková–Stuchlík* (1983); *idem* (1989) 187, Abb. 2. 1–4; *Stuchlík–Stuchlíková* (1996) Obr. 45.

**410. Veselí nad Moravou**

Stray vessel find.

*Peška* (1989) 193; *idem* (2001) 139.

**Romania**

**411. Berea–Platoul spanzuratoarei (Bere–Akasztófalapos)**

Stray finds (1950–1960).

*Roman–Németi* (1986) 216.

**412. Carei–Bobald (Nagykároly–Bobádi domb)**

Inurned burial.

Excavation (János Németi, 1997).

The urn was found on the southern side of the tell settlement, buried in the natural subsoil (Grave M1/1997, oval pit). The urn (H. 26.2 cm) was half full with the ashes of a 35–55 years old male and covered with a pot (H. ca. 26 cm). It was earlier assigned to the Sanislău/Szaniszló group of the Early Bronze Age 3 (Cp. *Németi–Dani* [2001] 112).

*Németi–Dani* (2001) 95–99, Figs 1–4; *Szathmáry* (2001).

**413. Ciumești–Bostănarie (Csomaköz–Tökös)**

Settlement.

Unstratified finds.

*Roman–Németi* (1986) 216.

**414. Ciumești–Via veche (Csomaköz–Ó-Szőlő)**

Stray finds.

*Roman–Németi* (1986) 216.

**\*415. Foeni (Fény)–Cimitirul Orthodox**

Stray find.

The fragment of a small interior decorated bowl was found in 1993, on a settlement of the so-called Gornea–Orlești group.

*Gogăltan* (1995) 56, Abb. 1. 6; *idem* (1996) 44, T. I. 9.

**\*416. Foeni (Fény)–Salaș**

Unstratified find.

Excavation (1993).

The fragment of an interior decorated bowl was found on a Neolithic settlement.

*Gogăltan* (1995) 56; *idem* (1996) 44, T. I. 1–7.

**\*417. Foieni–Fântâna Pășune (Mezőfény–Legelőkút)**

Inurned burial.

The grave goods were an urn and an interior decorated bowl.

*Németi* (1979) 533; *Németi–Roman* (1995) 25; *Németi* (1996) 31; *Kacsó* (1997) 428, Fig. 3. 5–8.

**\*418. Parța (Parác)**

Stray find.

Field survey (Florin Drașovean).

Fragment of an interior decorated bowl.

*Gogăltan* (1995) 56, Abb. 1. 7; *idem* (1996) 44, T. I. 8.

**\*419. Periam (Perjámos)**

Stray find.

Interior decorated bowl.

*Dumitrescu* (1974) 168, Abb. 178; *Schuster* (1995) 45, Abb. 2B.

**\*420. Pișcolt–Nișipărie (Piskolt–Homokbánya)**

Inurned burials.

Excavation (1970–1977).

Five inurned burials (Graves 33, 65, 74, 90, 121) and two disturbed inurned burials.

Grave 65: an interior decorated bowl with chequerboard decoration (*Németi* [1979] Fig. 2. 4–4a).

*Németi* (1979).



**\*421. Stamora Moravița (Temesmóra)**

Stray find.

Fragment of an interior decorated bowl with chequerboard decoration.

*Gogâltan* (1996) T. I. 10.

**422. Timișoara (Temesvár)–Freidorf**

Stray finds.

Gheorghe Lazarovici quoted late Vučedol finds.

*Lazarovici* (1987) 84; *Gogâltan* (1995) 56.

**423. Uivar (Újvár)–Gomila**

Settlement and burials.

Excavations (German–Romanian excavations, Wolfram Schier, Florin Drașovean, 1998–).

11 pits; burials (unpublished).

*Woidich* (2008).

**424. Valea lui Mihai (Érmihályfalva)**

Inurned burial (1924).

Grave goods: a pot, a bowl and an ornament fashioned from an animal tooth.

*Roska* (1932) 78, Figs 8–10.

**425. Zimandu Nou (Zimándújfalu)**

Burials?

Unpublished finds in the Arad Museum.

*Roman* (1988) 220; *Gogâltan* (1995) 56.

**Serbia**

**\*426. Čoka (Csóka)–Kremenyák**

Stray find.

Interior decorated bowl with cross shaped foot. H. 7.5 cm, dR. 15 cm.

*Vulić–Grbić* (1938) T. 13. 11; *Banner* (1939) 73, Abb. 2; *Patay* (1940) 3; *Kalicz* (1968) 77, Fo. 2.

**427. Rabe (Rábé)–Ankasziget**

Stray find.

Bird shaped vessel (askos). H. 20.5 cm.

The site was formerly specified as Sövényháza: *Banner* (1939) 84, Abb. 4. 5; *Kovács* (1972) 10; it is now specified as Rabe (Rábé)–Ankasziget: *Trogmayer–Vörös* (1994) 8; *Vörös* (1997) 125, cat. no. 3; *Szathmári* (2003) 515, Abb. 2. 1.

**\*428. Stapar (Sztapár)–Knežava bara [“Prince’s Marsh”]**

Settlement.

Excavation.

A single layer Makó–Kosihy–Čaka settlement (one pit, and fragment of an interior decorated bowl) in a marshland area.

*Koledin* (2007).





# THE SOMOGYVÁR–VINKOVCI CULTURE IN TRANSDANUBIA

## Introduction

The finds of the Somogyvár–Vinkovci culture, first identified in the 1960s, were initially attributed to other cultures such as the Baden, Pécel, Vučedol and Periam/Perjámos cultures.<sup>1026</sup> In an early overview, Patay classified the handled mugs from Rajka and Esztergom as vessels of the Aunjetitz culture,<sup>1027</sup> while Banner assigned two vessels from Somogyvár–Kupavárhegy and the vessels from Pécs–Makárhegy and Zók–Várhegy to the Pécel–Baden culture in the light of their ornamentation.<sup>1028</sup>

The systematic review and classification of the material in museum collections in the 1950s and 1960s brought major advances in Late Copper Age and Early Bronze Age studies in Hungary. In the early 1960s, Bóna's data collection in Transdanubia enabled the identification of the Somogyvár–Gönyű group based on the material from twenty-five sites.<sup>1029</sup> Later, after a detailed analysis of thirty-six sites in Transdanubia and the Burgenland, he renamed this cultural complex the Somogyvár group.<sup>1030</sup> Bóna correctly noted the resemblances with the pottery from the Slovenian (Ljubljana) and western Serbian tumulus burials.<sup>1031</sup> He distinguished two regional groups, Somogyvár A in Transdanubia and Somogyvár B in western Serbia, and mentioned a handful of similar smaller groups, amongst them the Glina III, Schneckenberg B–C and Gyula groups. Bóna also discussed the Aegean–Anatolian connections of the Somogyvár group: he believed that the pottery forms and their decoration could be derived from the Anatolian, south-east Thracian and eastern Macedonian territories of the Troy II–V/Veselinovo culture. The changes in the latter regions during the EBA III/MBA I triggered several migrations, whereby the communities forming the substratum of the Glina III–Schneckenberg/Gyula groups migrated northward along the Marica and Morava Valleys, while the groups from which the Somogyvár culture evolved advanced along the Axios, Vardar, Morava, Little Morava and Drina Valleys. At the time Bóna wrote his study, the Pécel–Somogyvár–Vučedol/Zók sequence seemed acceptable in the light of the then available evidence and, also, owing to the lack of stratified assemblages.

The stratigraphic sequence observed at Vinkovci–Tržnica opened new perspectives in the research of the Eneolithic in Croatia and Serbia because it called for a major revision of the earlier relative chronological schemes. Roughly at the same time as Bóna's study, Stojan Dimitrijević published the finds from former Yugoslavia resembling the Somogyvár material, which had earlier been in part assigned to the Vučedol culture.<sup>1032</sup> The excavations at Vinkovci enabled the separation of two main periods: an early Vinkovci (A) and a later Vinkovci (B1 and B2) period. The actual existence of Phase B of the (Somogyvár–)Vinkovci culture has so far only been documented in the stratigraphic sequence of this site. Dimitrijević believed that the Vinkovci culture evolved from a blend of the Vučedol substratum and various Early Bronze Age elements from the Southern Balkans.<sup>1033</sup>

<sup>1026</sup> For an overview of earlier research, cp. Bóna (1965a) 51.

<sup>1027</sup> Patay (1938) 71–72, Taf. IX. 1.

<sup>1028</sup> Banner (1956) 27, Taf. IX. 2–3.

<sup>1029</sup> Bóna (1960a) 85–92, 94; *idem* (1961) 7–8.

<sup>1030</sup> Bóna (1965a) 39–44.

<sup>1031</sup> Klinci, Markovica, Negrišori, Priboj, Robaje, Žabari: Bóna (1965a) 44–45.

<sup>1032</sup> Dimitrijević (1966) cp. earlier: *idem* (1956a); *idem* (1956b).

<sup>1033</sup> Dimitrijević (1966) 28–36.



In his publication of the vessel deposit from Nagyvejke, Bóna modified his earlier views on the culture's relative chronology in the light of the stratigraphy of the Vinkovci–Tržnica site: he argued that Vinkovci A could be correlated with the Somogyvár group, while Vinkovci B represented the culture's local, later development in the Srem.<sup>1034</sup>

In a brief paper published in 1968, Nicola Tasić reviewed the Vinkovci sites in the Srem and Slavonia, noting that the most important sites were Bosut am Gradina (Batrovci–Gradina), Orolik and Vrdnik, while the westernmost point of the culture's distribution was marked by the Drljnovac site near Bjelovar. Tasić too invoked cultural impulses from the Southern Balkans for explaining the emergence of the Vinkovci culture and the appearance of the genetically related Makó–Kosihy–Čaka and Nyírség cultures on the Vučedol substratum.<sup>1035</sup>

Bándi's label, the Zók–Somogyvár–Lasinja culture, reflected an essentially different relative chronological and typological scheme.<sup>1036</sup> In his view, the Zók material from Transdanubia bore a resemblance to the then less known Makó pottery and he therefore assigned the Somogyvár sites identified by Bóna to the Zók culture. Following his excavations at Pécs–Nagyárpád and other sites, Bándi equated the Early Bronze Age 1 in Transdanubia with the Makó, Zók–Somogyvár, Somogyvár–Vinkovci and Vučedol C groups, suggesting that Somogyvár–Vinkovci groups survived into the Early Bronze Age 2 in southern Transdanubia.<sup>1037</sup>

In the early 1970s, Kalicz-Schreiber voiced her conviction that the Makó group of the Zók culture had occupied the greater part of Transdanubia (with the exception of County Baranya and the southerly parts of County Somogy) during the Early Bronze Age 1. The flasks in the ceramic inventory from the Mezőkomárom and Budapest–Hollandi Road settlements suggested to her that the Somogyvár group made its appearance during the Early Bronze Age 2, more or less simultaneously with the early Nagyrév culture and the Bell Beaker–Csepel group, and that the Somogyvár distribution extended to north-eastern Transdanubia.<sup>1038</sup>

Quoting the findings of the excavations in south-eastern Transdanubia, Ecsedy noted the changing boundaries of the Somogyvár–Vinkovci distribution and stressed the uniform nature of the culture's material during the post-Vučedol I and II periods.<sup>1039</sup> Presenting a series of chronological and typological arguments, he re-assigned a smaller part of the earlier Makó sites to the Zók–Vučedol culture, the late Vučedol period and the early Nagyrév period, and a greater part to the Somogyvár–Vinkovci culture.<sup>1040</sup> The number of Transdanubian sites still attributed to the Makó culture declined to fourteen.<sup>1041</sup> Ecsedy identified thirty-eight Transdanubian and Slavonian sites of the Somogyvár–Vinkovci culture, in part based on the systematic field surveys and data collection conducted in the 1960s and in part on his excavations at Szava, Lánycsók and Zók–Várhegy. He supplemented his list with the northern Transdanubian sites he believed to have been occupied by late Somogyvár–Vinkovci communities.<sup>1042</sup> In his scheme, the Makó–Kosihy–Čaka culture was only distributed in the northern half of Transdanubia during the post-Vučedol I period, while the territory occupied by the Somogyvár–Vinkovci culture extended to the Balaton Uplands, with the culture's communities advancing to the Little Hungarian Plain and the Lake Fertő area much later, during the

<sup>1034</sup> Bóna (1972) 11–14.

<sup>1035</sup> Tasić (1968); *idem* (1971).

<sup>1036</sup> Bándi (1968a); *idem* (1968b) Map 1. For a critique of Bándi's theses, cp. Bóna (1972) 9–11.

<sup>1037</sup> Bándi (1980) 81–84; *idem* (1981) 25, Taf. 12; *idem* (1984b).

<sup>1038</sup> Kalicz-Schreiber (1975a) Abb. 1; *idem* (1975b); *idem* (1976a) Abb. 1; *idem* (1976b) Abb. 1a–b.

<sup>1039</sup> Ecsedy (1978b); *idem* (1979a) 108–111, Abb. 7–9.

<sup>1040</sup> Ecsedy (1979a) 108.

<sup>1041</sup> Kalicz (1968) Fo. 37–46, 55–56, 64, 68–69.

<sup>1042</sup> Ecsedy (1979a) 104–105, 110, Fo. 1–37.



post-Vučedol II period. In north-eastern Transdanubia, the culture was forced to retreat to the Sió–Sárvíz line after the arrival of early Nagyrév groups.<sup>1043</sup> Ecsedy readily acknowledged that cultural impacts from the south could be demonstrated in the find assemblages of the Carpathian Basin, but believed that these should be conceptualised as a continuous integration process rather than as actual population movements. The Somogyvár–Vinkovci culture appeared in the south at the close of the Vučedol C period and survived to see the appearance of the Kisapostag culture. Ecsedy identified the latest Vučedol material (Vučedol C) known from southern Transdanubia among the finds of Pit 3 at Lánycsók.<sup>1044</sup> He addressed the problems of late Vučedol metallurgy in his discussion of the moulds brought to light at Zók–Várhegy.<sup>1045</sup>

Dimitrijević refined his chronological scheme following the investigation of the Vinkovci–Tržnica (Hotel) site in 1977–78.<sup>1046</sup> He argued for the contemporaneity of the Vučedol C and Vinkovci A1 horizons and correlated the Vinkovci A2 horizon with the Nagyrév/Bell Beaker–Csepel/Hatvan/Pitvaros/Somogyvár/Ljubljana cultures.

In a 1981 study, Zorko Marković reviewed the history of the Vučedol culture in Slovenia and Croatia. He distinguished three chronological horizons: Vučedol I (Vučedol B2), Vučedol II (Vučedol C), and Vučedol III (Rudina I/Ljubljana/Vinkovci A/Makó/Somogyvár/RB A1).<sup>1047</sup>

In 1982, Bándi, Kalicz and Kalicz-Schreiber proposed a chronological scheme, according to which the boundary between the Makó–Kosihy–Čaka culture and the Somogyvár–Vinkovci I culture in Transdanubia lay along the Sárvíz Valley and the line between the Sárvíz and Lake Fertő during the Early Bronze Age 1, while the Early Bronze Age 2 saw the slight eastward spread of the Somogyvár–Vinkovci culture and the appearance of the early Nagyrév culture and the Bell Beaker–Csepel group in the Budapest area and north-eastern Transdanubia.<sup>1048</sup> This scheme was not substantially revised during the next few years, although a few minor modifications were made in the light of subsequent research: the uncertain boundary along the Veszprém–Zirc–Pápa line between the two cultures in the Early Bronze Age 1 was extended to the zone between the Sió and the Sárvíz,<sup>1049</sup> and then to the Danube along the Sió.<sup>1050</sup> The cultural attribution of the sites south of Lake Fertő and in the Balaton Uplands remained uncertain.<sup>1051</sup> The contact zone between the late Somogyvár–Vinkovci culture and the early Nagyrév/Bell Beaker–Csepel group remained virtually unchanged following the division of the Early Bronze Age 2 into two sub-phases.<sup>1052</sup> Inherent in this scheme was the assumption of two distinct developmental phases in the Somogyvár–Vinkovci sequence, which seems justified on chronological grounds.

In the early 1980s, studies focusing on smaller groups, such as the Ada and Roşia groups, related to the Somogyvár–Vinkovci/Glina III–Schneckenberg cultures<sup>1053</sup> led to interpretations of the Late Eneolithic/Early Bronze Age units with similar pottery styles as cultural complexes.

<sup>1043</sup> Ecsedy (1979a) Abb. 8–9; *idem* (1981a).

<sup>1044</sup> Ecsedy (1980).

<sup>1045</sup> Ecsedy (1983a).

<sup>1046</sup> Dimitrijević (1977–78); *idem* (1982a); *idem* (1982b).

<sup>1047</sup> Marković (1981) 260–263, Sl. 10.

<sup>1048</sup> Bándi (1982) Abb. 1; Kalicz (1982) Abb. 1; Kalicz-Schreiber (1982) Abb. 1–3; Kovács (1982) Abb. 1; Kalicz (1984a) 215, Karte 3; Kalicz-Schreiber (1984a) 48.

<sup>1049</sup> Kalicz-Schreiber (1984b) 190, Karte 2.

<sup>1050</sup> Kalicz-Schreiber (1991) Fig. 8.

<sup>1051</sup> Kalicz-Schreiber–Kalicz (1997) Abb. 1.

<sup>1052</sup> Kalicz-Schreiber (1991) Figs 8–9; Kalicz-Schreiber–Kalicz (1997) Abb. 2.

<sup>1053</sup> Horváth (1984a) and Emődi (1985); Emődi–Halasi (1985); Roman–Németi (1986).



Milutin Garašanin was the first to review the relevant Yugoslavian finds and circumscribe a unit he labelled the Danubian–Balkan cultural complex.<sup>1054</sup> In a similar vein, Jan Machnik postulated a Danubian–Central and South-East European Early Bronze Age civilisation encompassing the Glina III–Schneckenberg/Somogyvár–Vinkovci/Belotić–Bela Crkva/Laibach/Makó–Kosihy–Čaka/early Nagyrév/Bell Beaker–Csepel/Óbéba–Pitvaros/Maros/Nyírség–Zatin/proto-Aunjetitz/Chłopice–Veselé cultures extending from the Northern Balkans to the Carpathians and beyond, to the Dniester and Prut regions, characterised by similar pottery vessels, metalwork and settlement patterns. In his view, the rhythm of development was more or less the same across this vast cultural complex.<sup>1055</sup> Sharing the views of other prehistorians, Machnik derived the elements of this cultural complex from the Early Bronze Age Aegean and Anatolian civilisations, although he believed that the cradle of the changes sweeping across the region lay not in the Aegean or Anatolia, but farther to the east, in the southern Caucasus.<sup>1056</sup>

Tasić distinguished three smaller regional/chronological/typological groups within a larger geographic and cultural unit: a Transdanubian zone (Somogyvár–Vinkovci), a Central Balkanic zone encompassing western Serbia, the Drina Valley, the Morava Valley (Ostrikovac/Svetozarevo), the Kruševac area and Montenegro (Cave Odmud), and a western Carpathian zone in Romania (Verbița, Cave Călățele/Kalota, Rîpa) and southern Hungary (the Szeged area).<sup>1057</sup>

In her analysis of the less well known western Transdanubian areas of the Somogyvár–Vinkovci culture and of the vessels with asymmetrical handles, Kalicz-Schreiber distinguished three regional and typological groups in Transdanubia.<sup>1058</sup> The first group, related to the Vučedol–Laibach and the Rudina type, occupied the Alpine foreland (Csepreg, Sé); the second group, distributed in south-western Transdanubia, shared many resemblances with the Makó–Kosihy–Čaka culture regarding its pottery and pottery manufacturing techniques (Nagykanizsa, Letenye), while the third group in north-western Transdanubia was dominated by the Makó–Kosihy–Čaka culture and the Somogyvár–Vinkovci culture, the latter sharing numerous traits with the south-western Transdanubian assemblages.

In the early 1990s, Bóna published a major study on the cultural trajectories of the Early Bronze Age.<sup>1059</sup> In his scheme, the major regions of Transdanubia were occupied by the Makó–Kosihy–Čaka population in the Early Bronze Age 1, while southern Baranya, Slavonia and the Srem was populated by late Vučedol groups and the regions to the west by Ljubljana/Laibach communities. He dated the earliest appearance of the Somogyvár–Vinkovci culture to the Early Bronze Age 2, when the greater part of the Carpathian Basin was occupied by related groups arriving from the Balkans, from Thessaly and Macedonia. Bóna distinguished several groups, advancing in different directions: the Somogyvár–Vinkovci A1 groups occupying Transdanubia, the Somogyvár–proto-Nagyrév group<sup>1060</sup> settling on the loess plateau flanking the right Danube bank, the Somogyvár–Ada group migrating to the Tisza region, and the (Somogyvár–)Gyula–Roșia group along the Körös Rivers. The eastern branch of the population groups migrating from the south penetrated the Lower Danube valley and contributed to the formation of the Glina III culture, which entered southern Transylvania along the Olt and led to the emergence of the (Somogyvár–)Schneckenberg culture. One of the major

<sup>1054</sup> Garašanin (1983).

<sup>1055</sup> Machnik (1987); *idem* (1991a); *idem* (1991b).

<sup>1056</sup> Machnik (1991c) 99–100.

<sup>1057</sup> E.g. the Ada and Gyula-Roșia groups. Cp. Tasić (1984) 15–16.

<sup>1058</sup> Kalicz-Schreiber (1991).

<sup>1059</sup> Bóna (1992a) 11–16, Frühe Bronzezeit I–III maps.

<sup>1060</sup> Earlier: Bóna (1963) 22, cp. Szabó (1992); *idem* (1994).



differences between Bóna's scheme and the chronological system proposed by Ecsedy, Bándi, Kalicz and Kalicz-Schreiber was the assumption of surviving Somogyvár groups south of Lake Balaton ("Rest-Somogyvár") and of Szava-Vinkovci A2 groups during the Early Bronze Age 3, contemporaneously with the early Nagyrév culture and the arrival of the Drassburg-Kisapostag groups in north-western Transdanubia.

Recent studies on the Early Bronze Age of Transylvania generally agree that the Schneckenberg groups arriving to that region had a lasting impact on several smaller cultural units: the Zăbăla group in south-eastern Transylvania,<sup>1061</sup> and the Livezile group and, later still, the Soimuș group in central and south-western Transylvania.<sup>1062</sup> These groups are generally dated to the Early Bronze Age 1–2 of Romania (middle third of the 3rd millennium BC).<sup>1063</sup>

The past few years have seen the publication of many major assemblages, the perhaps most important among these being the material from the Little Hungarian Plain.<sup>1064</sup> The finds indicate that in this region the Somogyvár-Vinkovci culture succeeded the earlier Makó groups during the Early Bronze Age 2 and that the blend of this culture with the Kisapostag elements arriving at the onset of the Early Bronze Age 3 resulted in a transitional, proto-Kisapostag phase.

In his discussion of the proto-Nagyrév settlements along the Danube, Géza Szabó adopted a slightly different research perspective and argued for the contemporaneity of the Makó, Somogyvár, proto-Nagyrév and in part the Ada groups in the Early Bronze Age 1.<sup>1065</sup>

Mária Bondár published the most detailed typology of the culture's ceramic inventory alongside a full catalogue of the known Somogyvár-Vinkovci sites following the archaeological investigations in south-western Transdanubia and her excavation of the Börzönce-Temetői-dűlő site.<sup>1066</sup> She also discussed the period's wagon models and figurines alongside an overview of settlement patterns and the period's earlier research.<sup>1067</sup>

In a recent study on one-handed small mugs, handled jugs and shaft-hole axes, Kalicz and Kalicz-Schreiber argued for a two-phase development of the Somogyvár-Vinkovci culture spanning the Early Bronze Age 1 and 2.<sup>1068</sup>

In the early 1990s, Ecsedy recapitulated his views on the metallurgy of the Late Copper Age and the Early Bronze Age,<sup>1069</sup> the controversies over the emergence of Early Bronze Age cultures and the impact of Northern Balkanic and steppean population groups on the cultural development of the Carpathian Basin.<sup>1070</sup> In his view, there emerged a more or less uniform pottery and metalwork across the Carpathian Basin, in which new forms appeared alongside the elements based on and preserving the late Vučedol traditions (late Vučedol, Somogyvár-Vinkovci, Makó-Kosihy-Čaka cultures, followed by the Nyírség and early Nagyrév cultures). Ecsedy argued for a model of cultural integration rather than the migration of various population groups. One major advance was the

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<sup>1061</sup> Székely (1997).

<sup>1062</sup> Ciugudean (1991); *idem* (1996).

<sup>1063</sup> Livezile/Csíksszentlélek–Baia (Early Bronze Age 1, 2700–2580 BC): Ciugudean (1996) 146.

<sup>1064</sup> Figler (1994); *idem* (1996a).

<sup>1065</sup> Szabó (1992); *idem* (1994) Abb. 1.

<sup>1066</sup> Bondár (1995); *idem* (2003).

<sup>1067</sup> Bondár (1990); *idem* (1992); *idem* (1994); *idem* (1996a); *idem* (1996b); *idem* (2001); Bondár–Kiss (2007).

<sup>1068</sup> Kalicz-Schreiber–Kalicz (1997); *idem* (1999); *idem* (2000).

<sup>1069</sup> Ecsedy (1990).

<sup>1070</sup> Ecsedy (1994a) 17–18.



integration of the chronology<sup>1071</sup> based on the newest calibrated radiocarbon dates,<sup>1072</sup> indicating that the changes of the late Vučedol period earlier believed to have begun around 2000/1900 BC started much earlier, around the mid-3rd millennium BC.

*The relative and absolute chronology of the Somogyvár–Vinkovci culture*

A duality can be noted in the usage of the terms Late Eneolithic and Early Bronze Age. Research in the countries bordering on Hungary has generally adopted the Western and Central European division of the Bronze Age based on metal types and Reinecke's chronology, in which the cultures of the Hungarian Early Bronze Age 1 and 2 are usually lumped under the "Late Eneolithic culture complex".<sup>1073</sup> The chronological scheme used in Hungary has more recently been accepted by Romanian research with a few modifications.<sup>1074</sup> Ecsedy proposed the label "post-Vučedol period" in addition to the term Late Eneolithic culture complex.<sup>1075</sup> The introduction of the RB A0 phase, corresponding to the Early Bronze Age 2b, was suggested in order to resolve the conflicts between the two schemes.<sup>1076</sup> Hermann Parzinger worked out a framework of fifteen horizons spanning the period from the Early Neolithic to the Middle Bronze Age in order to eliminate the discrepancies between conflicting chronological schemes and to provide a coherent system for an extensive geographic area.<sup>1077</sup> A comparison and critical assessment of the different relative chronological "schools" has recently been published by Gogăltan and Blagoje Govedarica.<sup>1078</sup>

According to the Hungarian chronological scheme, the Somogyvár–Vinkovci culture appeared in the Early Bronze Age 1<sup>1079</sup> or the Early Bronze Age 2<sup>1080</sup> in the southern and western regions of the Carpathian Basin, and survived until the end of the Early Bronze Age 3.

Ecsedy correlated the onset of the Early Bronze Age with the cultural transformation beginning in the classical Vučedol period and the succeeding post-Vučedol I period.<sup>1081</sup> Bóna correlated the onset of the Bronze Age with the late Vučedol period,<sup>1082</sup> while Kalicz-Schreiber and Kalicz with the period following the late Vučedol period.<sup>1083</sup>

In his study on the chronology and cultural relations of the Greek mainland and the Cyclades, Joseph Maran also discussed the network of cultural contacts during the 3rd millennium BC of the broader region, including South and South-East Europe, with a focus on the comparison of the relative and absolute chronological schemes. He ordered the late 4th and 3rd millennium BC cultures

<sup>1071</sup> Ecsedy (1994a) 17; Kalicz-Schreiber–Kalicz (1997); Maran (1998).

<sup>1072</sup> Durman–Obelić (1989); Raczy et al. (1992); Forenbaher (1993).

<sup>1073</sup> Cp. Vladár (1966) 249; Burger (1988) 210; Govedarica (1989a) Abb. 29; Lichardus–Vladár (1996) 29; Maran (1998) 311 ff. Bernhard Hänsel offered a critical discussion of the Hungarian relative chronological system and Reinecke's division on which it was based, cp. Hänsel (1968) 19.

<sup>1074</sup> Roman (1985); *idem* (1986) 29–32, Fig. 7; Roman–Németi (1989); Vulpe (1991); Ciugudean (1996); Vulpe (1997); Gogăltan (1998); *idem* (1999b).

<sup>1075</sup> Ecsedy (1979a) 109.

<sup>1076</sup> Bertemes–Heyd (1996) 23; Lichardus–Vladár (1996).

<sup>1077</sup> Parzinger (1993) Abb. 16.

<sup>1078</sup> Govedarica (1989a) Abb. 29; Gogăltan (1998); *idem* (1999b).

<sup>1079</sup> Ecsedy (1979a); Kalicz-Schreiber (1989); *idem* (1991); Ecsedy (1994a); *idem* (1994b); Kalicz-Schreiber–Kalicz (1997); *idem* (1999).

<sup>1080</sup> Bóna (1992a) 16.

<sup>1081</sup> Ecsedy (1979a) 118, Abb. 7–9; *idem* (1985) 93; *idem* (1994a) 17–18: Early Bronze Age: Vučedol culture/Kostolac/late Ezero (Mihalič)/Early Helladic cultures.

<sup>1082</sup> Bóna (1992a) 16.

<sup>1083</sup> Kalicz-Schreiber (1989); *idem* (1991); Kalicz-Schreiber–Kalicz (1997); *idem* (1999).



and cultural processes of South-East Europe, the Aegean and Anatolia into four chronological horizons, with the first horizon spanning the period between 3500 and 3000 BC (Troy I/Baden), the second between 3000 and 2550/2500 BC (EH I–II/Kostolac/late Vučedol), the third between 2550/2500 and 2200 BC (EH II/EH II–III) and the fourth between 2200 and 2000 BC (EH III/RB A1).<sup>1084</sup> Maran accepted Ecsedy's post-Vučedol label, but slightly modified its usage.<sup>1085</sup> In his view, the early Somogyvár–Vinkovci and the Makó–Kosihy–Čaka cultures appeared in the late Vučedol (Vučedol C) period (Hungarian Early Bronze Age 1), between the classical Vučedol period (Vučedol B) and the so-called post-Vučedol period (Hungarian Early Bronze Age 2). In his view, the Makó–Kosihy–Čaka sequence did not extend into the so-called post-Vučedol period. Maran's post-Vučedol period thus corresponds to Ecsedy's post-Vučedol II period (Bell Beaker–Csepel/Somogyvár–Vinkovci/early Nagyrév/Pitvaros/Nyírség).

The most reliable anchors for any relative chronology are the stratigraphic data. In this case, this anchor was provided by the stratigraphic sequence observed at Vinkovci–Tržnica and Hotel in eastern Slavonia in the southern Somogyvár–Vinkovci distribution. Dimitrijević distinguished four layers (Horizons A–D), of which three were dated to the Eneolithic and the Early Bronze Age (Horizons B–D1).<sup>1086</sup> Horizon B was correlated with the late phase of the classical Vučedol culture (Dimitrijević's Vučedol B2), which was succeeded by Horizon C without a break. Dimitrijević divided Horizon C into two sub-phases: Horizon C1 was marked by the survival of late Vučedol traditions and the appearance of the typical finds of the (Somogyvár–)Vinkovci culture, while Horizon C2 saw the virtual disappearance of Vučedol finds and the growing dominance of the (Somogyvár–)Vinkovci pottery style. Horizon C was correlated with the early Somogyvár–Vinkovci period (A). Horizon C1 was equated with Somogyvár–Vinkovci A1, assigned to the Early Bronze Age 1 and thus contemporaneous with the Makó–Kosihy–Čaka culture occupying the central and eastern regions of the Carpathian Basin, while Horizon C2 with Somogyvár–Vinkovci A2, synchronous with the Ljubljana culture and the Bell Beaker–Csepel group, corresponding to the post-Vučedol period.

Phase B of the (Somogyvár–)Vinkovci culture has to date only been demonstrated at the Vinkovci site (Horizon D1; Bebrina type). This horizon was marked by the absence of pottery types still present in Horizon C and the appearance of incised designs on handled bowls recalling similar Nagyrév patterns. Accepting Dimitrijević's claim of the resemblance between the two ornamental styles and a correlation with the Nagyrév culture, Horizon D1 can be synchronised with the Hungarian Early Bronze Age 3 and the Central European Early Bronze Age 1 (RB A1 phase). However, the bowl type in question can hardly be regarded as one of the hallmarks of Horizon D1, and thus an earlier date for this horizon is also feasible, corresponding to the Hungarian Early Bronze Age 2 (2b) as defined by Maran.<sup>1087</sup>

The stratigraphic sequence of Gomolava in the Srem only spanned the classical Baden, Kostolac, classical Vučedol periods, which was followed by the Middle Bronze Age settlement of the Vattina culture. Evidence for Somogyvár–Vinkovci and early Nagyrév occupation comes from other sites in the Gomolava area. The stratigraphy of Vučedol–Gradac, Kukuruzište Streim and Vinograd Streim, and the material from earlier and more recent excavations<sup>1088</sup> sheds much needed light on the Baden, Kostolac, Vučedol, post-Vučedol periods. The stratified settlement at Sarvaš–Gradac in Slavonia yielded finds from the Baden and the Somogyvár–Vinkovci periods. The find assemblages from

<sup>1084</sup> Maran (1998).

<sup>1085</sup> *Ibidem* 315, Taf. 82.

<sup>1086</sup> Dimitrijević (1966); *idem* (1982a).

<sup>1087</sup> Maran (1998) 313, Anm. 44.

<sup>1088</sup> Schmidt (1945) and Durman (1988); cp. also Parzinger (1993).



Zók–Várhegy and Pécs–Nagyárpád in southern Baranya offer important chronological anchors for the culture's internal chronology.<sup>1089</sup> However, the basic relative chronology cannot be refined until the finds from these major sites are published in full.

There has been some controversy over the existence of different Somogyvár–Vinkovci phases. The ceramic typology and the changes in the culture's settlement patterns, as well as the stratigraphic sequence noted at Vinkovci–Tržnica suggest the existence of at least two phases (an early and a late phase).

It is not always clear from the publications whether the designations “early” and “late” cover genuine typological differences or whether they are simply convenient labels used for indicating relative chronological and/or regional differences (cultures assigned to the Early Bronze Age 1–2 or 2–3).

At present, a sharp boundary cannot be drawn between the two phases. However, the distinction of an early and a late phase seems justified in view of the transformation of the cultural milieu leading to changes in the system of cultural contacts and the culture's long duration, indicated by the appearance of certain vessel types and the disappearance of others.<sup>1090</sup>

Several studies have been devoted to the analysis and interpretation of the growing number of absolute chronological dates, both earlier and more recent ones, offering a growing number of secure anchors for dating the Early Bronze Age of the Carpathian Basin.<sup>1091</sup> According to the currently available data, the Somogyvár–Vinkovci sequence can be dated to the mid-3rd millennium BC (2600/2500–2300 BC).<sup>1092</sup>

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<sup>1089</sup> Bándi (1981); *Ecsedy* (1980); *idem* (1983a).

<sup>1090</sup> The presence or absence of interior decorated bowls was earlier regarded as one of these chronological indicators. Cp. *Kalicz-Schreiber-Kalicz* (1997) 84.

<sup>1091</sup> *Raczky* (1988); *Durman-Obelić* (1989) 1004; *Srdoč et al.* (1989); *Raczky et al.* (1992) 43; *Forenbaher* (1993) 241; *Ecsedy* (1994a) 17; *Raczky* (1995); *Della Casa* (1996) 132, Fig. 154; *Figler* (1996a) 9, note 8; *Primas* (1996) 168; *Novotná* (1998) 351; *Maran* (1998); *Gogâltan* (1998); *idem* (1999b); *Nikolova* (1999); *Stadler* (2002); *Nikolova-Görsdorf* (2003); *Velušček-Čufar* (2003) 141; *Šavel* (2005); *Kalafatić* (2006) 23–24; *Šavel* (2006); *Rassamakin-Nikolova* (2008) 59–60, Fig. 5.

<sup>1092</sup> A part of the data cited in the above cannot be reconciled with the current dating of the cultures/groups mentioned in connection with the early cultural connections of the Somogyvár–Vinkovci culture. Thus, for example, there is an apparent contradiction between the dates for the Mala Gruda and Velika Gruda burials (2800–2700 BC: *Primas* [1996] 154) the new dates for the tumulus burials at Neusiedl am See (2820–2660 BC: *Stadler* [2002]; cp. *Ruttkay* [2002]; *idem* [2003]) and the Early Bronze Age 1–2 dates for central and south-western Transylvania (Livezile–Baia, EBA 1: 2700–2580 BC: *Ciugudean* [1996] 146).



## The distribution of the Somogyvár–Vinkovci culture

While countless studies have been devoted to the Somogyvár–Vinkovci culture and various regional groups related to this complex, a map of the culture's sites and a detailed gazetteer of the sites in the culture's entire distribution were lacking for a long time.<sup>1093</sup> A map and a register of the culture's sites have recently been assembled by Bondár, who distinguished four main concentrations: the Vinkovci area, the Pécs area, Counties Somogy and Zala, and the Győr area.<sup>1094</sup>

The cultural attribution of the burials from Klinči, Markovica, Negrišori, Priboj, Robaje, Zarub and Žabari in the Drina Valley is still a matter of debate and some prehistorians continue to assign them to the Somogyvár–Vinkovci culture.<sup>1095</sup> While the pottery from these sites undoubtedly shares numerous similarities with Somogyvár–Vinkovci wares, they should nonetheless be regarded as sites of the Belotić–Bela Crkva group.<sup>1096</sup> The cultural interpretation of various groups visibly related to the Somogyvár–Vinkovci group, but exhibiting minor or major differences regarding their material culture, too runs into difficulties.<sup>1097</sup> It seems likely that smaller regional groups can be distinguished within this larger complex and that their emergence and later migrations can be reconstructed with a fair degree of accuracy (Somogyvár–proto-Nagyrév group, Somogyvár–Ada group, Somogyvár–Gyula–Roşia group, Somogyvár–Schneckenberg group).<sup>1098</sup> Ecsedy has correctly noted that a host of smaller groups appeared around the turn of the Late Copper and Early Bronze Ages, which continued the traditions of the late Vučedol culture, but also created their own distinctive traits, and eventually evolved into independent cultures.<sup>1099</sup> One of the cultural cohesives between the related or like regions/populations was undoubtedly the metal industry producing shaft-hole axes, whose distribution extended from Austria to the Prut–Dniester region and from southern Poland to Bulgaria.<sup>1100</sup> Biconical handled jugs with cylindrical neck of southern origin, whose distribution overlaps with that of the copper axes, have been recently added to the cultural package reflecting this shared network of contacts.<sup>1101</sup>

This section will focus on the culture's Transdanubian sites and the re-evaluation of earlier assemblages and stray finds within the broader region characterised by more or less related, but nonetheless slightly differing assemblages/groups extending from the northern and north-western Balkans through Transylvania and the southerly areas of the Danube–Tisza Interfluvium to Transdanubia. As has been already mentioned in the Foreword, I had the possibility to personally examine the finds from southern Transdanubia (Counties Somogy and Tolna and, in part, County Zala). The evaluation of the other finds is based on the published reports. The sites of the

<sup>1093</sup> The catalogue of Hungarian sites was assembled by Ecsedy (1979a) Abb. 6, while a list of the ones in the regions of former Yugoslavia by Garašanin (1983) 834, Map 11.

<sup>1094</sup> 138 sites: Bondár (1995) 230, 250–254, Fig. 19; *idem* (1998) 28–29, Fig. 2.

<sup>1095</sup> E.g. Bóna (1965a); more recently by Bondár (1995) 252–254, Fig. 19.

<sup>1096</sup> Garašanin (1958) 90–95. Interestingly enough, a recent overview and detailed discussion of the burial mounds at Velika Gruda does not mention the stone packed, cist and tumulus burials of the Belotić–Bela Crkva group along the Drina. The closest parallels are quoted from Ampoiţa/Kisompoly in Transylvania, *cp. Primas* (1996) 132.

<sup>1097</sup> Machnik (1991a).

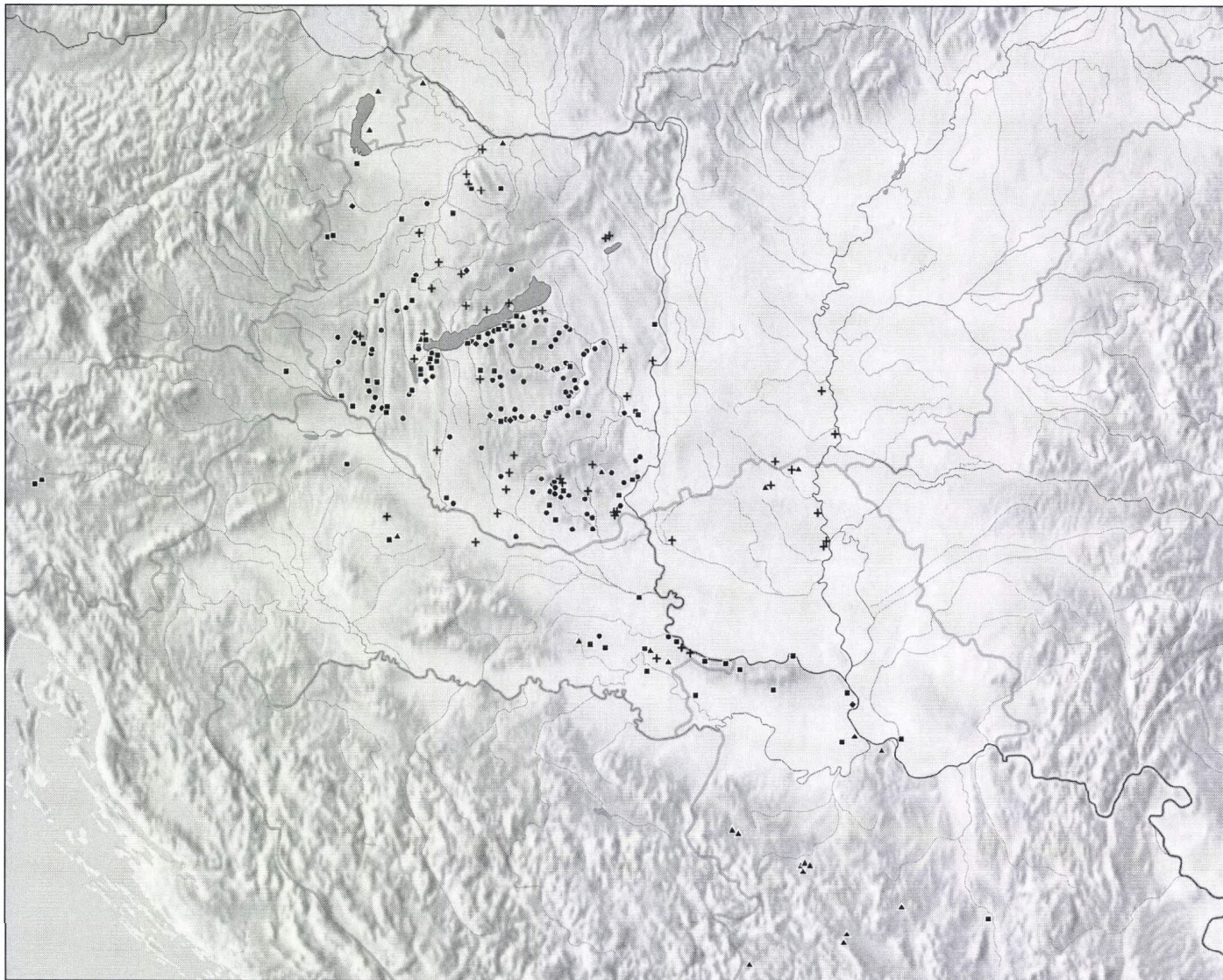
<sup>1098</sup> Bóna (1992a) 13–16.

<sup>1099</sup> Ecsedy (1994a) 19–21.

<sup>1100</sup> *Ibidem* 19–21; *idem* (1994b).

<sup>1101</sup> Kalicz–Schreiber–Kalicz (1997) 330, Abb. 3; *idem* (1999) 85.





*Fig. 39. Sites of the Somogyvár–Vinkovci culture*  
 + stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial



Regions of the Somogyvár–Vinkovci culture	Stray finds	Settlement (field survey and stray finds)	Settlement (excavation)	Settlement and burial	Burial	Total
<b>Region I</b>	<b>34</b>	<b>127</b>	<b>56</b>	<b>5</b>	<b>3</b>	<b>225</b>
Baranya	14	23	5	1	–	43
Somogy	12	48	31	4	1	96
Tolna	4	36	5	–	–	45
Zala	4	20	15	–	2	41
<b>Region II</b>	<b>14</b>	<b>3</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>31</b>
Fejér	3	–	–	–	–	3
Győr-Moson-Sopron	4	–	3	–	2	9
Komárom-Esztergom	–	–	–	–	–	–
Vas	1	–	3	1	–	5
Veszprém	6	3	2	1	–	12
Austria	–	–	–	–	2	2
<b>Region III</b>	<b>7</b>	<b>2</b>	<b>21</b>	<b>1</b>	<b>6</b>	<b>37</b>
Croatia	7	2	10	–	4	23
Serbia	–	–	8	1	2	11
Slovenia	–	–	3	–	–	3
<b>Total</b>	<b>55</b>	<b>132</b>	<b>85</b>	<b>8</b>	<b>13</b>	<b>293</b>

Fig. 40. Regional distribution of the Somogyvár–Vinkovci sites

Somogyvár–Vinkovci culture and the finds that can be assigned to this period are here discussed according to the following regional division (Figs 39–40):<sup>1102</sup>

- Region I: Southern Transdanubia (Counties Baranya, Somogy, Tolna and Zala) (Fig. 41);
- Region II: Western and northern Transdanubia and Austria (Counties Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Vas, Veszprém and Austria) (Fig. 42);
- Region III: The southerly regions (Croatia, Serbia and Slovenia) (Fig. 43).

The currently known Somogyvár–Vinkovci sites in Transdanubia and Croatia, Serbia and Slovenia indicate that the northernmost sites are represented by the mounds at Rajka–Modrovich puszta and Neusiedl am See, while the southernmost sites are marked by the settlements in the Belgrade area and the burials on sites of the Belotić–Bela Crkva group.<sup>1103</sup> Several regional groups evolved across this extensive territory, which can best be distinguished by their pottery. In addition to the regional differences, chronological differences can also be assumed between these groups; however, owing to the many unpublished or but briefly mentioned assemblages, only a tentative outline of their chronology relative to each other will be offered here.

<sup>1102</sup> A list of the culture’s sites and the relevant information on each site is presented in Catalogue II (pp. 359).

<sup>1103</sup> The related eastern (Roşia group, Glina III–Schneckenberg culture) and western (Ljubljana and Adriatic groups) cultural complexes are not discussed here.





*Fig. 41. Distribution of the Somogyvár–Vinkovci culture*

Region I: Southern Transdanubia

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

2. Alsónyék–Lajvér-pusztá, 3. Ádánd, 4. Bak–Rózsa Street, 5. Baksa–Kopárdűlő, 6. Balatonberény, 7. Balatonboglár–Eastern bank of Forró árok, 8. Balatonboglár–Kokashegy, 9. Balatonhídvégpuszta (Zalavár), 10. Balatonkeresztúr–Kiserdei-dűlő, 11. Balatonkeresztúr–Réti földek, 12. Balatonlelle–Gamási-dűlő, 13. Balatonlelle–Kenderföld, 14. Balatonlelle–Rádi-domb, 15. Balatonlelle–Rádpusztá, 16. Balatonlelle–along the Rádi Road, 17. Balatonmagyaród–Hídvégpuszta, 18. Balatonmagyaród–Szarkavári sziget, 19. Balatonöszöd–Dinnyeföldi-dűlő, 20. Balatonöszöd–Temetői-dűlő, 21. Balatonszabadi, 22. Balatonszemes–next to Csillagpuszta, 23. Balatonszemes–Egyenes-dűlő, 24. Balatonszemes–Szemesi-berek, 25–26. Balatonszentgyörgy area, 27. Barcs–Vukovár, 28. Baté, 29. Bátaszék–Szentá, 30. Becsvölgye–Barabásszeg, 31. Beleg area, 32. Boda–Nyafastó-dűlő, 33. Boldogasszonyfa, 34. Bonnya–Pogánydomb, 36. Börzönce–Temetői-dűlő, 40. Csertő–Szőlőhegy, 41. Csoma, 44. Dombóvár, 45. Dombóvár–Fehérhidi-dűlő, 46. Dombóvár–Gunaras, 47. Dombóvár–TESCO, 48. Döbrököz–Kétvíz köze, 49. Döbrököz–Tűzköves, 50. Döbrököz–TSZ silógödör, 52. Dunaszekcső–Kálvária-hegy, 53. Dunaszekcső–Várhegy, 54. Edde, 55. Edde–Szőlőhegy, 56. Erzsébet–TSZ



major, 57. Felsőnyék, 58. Felsőnyék–Aladárpuszta, 59. Felsőnyék–29 Táncsics Street, 60. Fonyód–Bézsény-puszta, 61. Fonyód–Vasúti-dűlő 2, 62. Galambok–Hársas-erdő, 63. Galambok–Öreghegy, 64. Geresd–Római temető, 65. Gombosszeg, 67. Gyöng, 71. Gyulaj, 72. Gyulaj, 73. Gyulaj–Banyahegy, 74. Gyulaj–Pogányvár, 76. Hollád, 77. Hollád–Körforgalom, 78. Homokkomárom, 79. Iregszemcse, 80. Ivánbattyán–Döggút, 81. Between Kadarkút and Somogysszentimre, 83. Kaposfüred–Desedapart, 84. Kaposfüred–Földnyelv, 85. Between Kaposfüred and Juta, 86. Kaposújlak–Várdomb, 87. Kaposvár, 88. Kaposvár, 89. Kaposvár–Stream Deseda, 90. Kaposvár–14 Irinyi Street, 91. Kaposvár–Simongáti-dűlő, 92. Kaposvár–40. Órház, 93. Kaposvár–Site 1, 94. Kaposvár–Site 10, 95. Kaposvár–Site 15, 96. Kaposvár–Site 16, 97. Kaposvár–Site 33, 98. Kaposvár–Site 37, 99. Kaposvár–between Site 39 and Site 40, 100. Kaposvár–Road 61, 101. Karád, 102. Karád area, 103. Kánya, 104. Kemendollár–Várdomb, 106. Keszthely–Alsódobogó, 107. Keszthely–Halászcserda, 108. Keszthely–Lehenrét, 109. Keszthely–Újdűlő, 110. Keszthely–18. sz. vasúti órház, 111. Keszű–Berekalja, 112. Kéthely–Baglyas-domb, 113. Kétújfalu–Szentmihályfa, 114. Kisjakabfalva, 115. Kissziget–Temetődomb, 116. Komlósd–Szőlőhegy, 117. Koppányszántó, 118. Koppányszántó–Rendeserdő, 120. Kozármisleny–Öregszőlődomb, 121. Kökény, 122. Kökény–Kökénypuszta, 123. Lánycsók–Égettmalom, 124. Lengyel, 125. Letenye–Szentkereszt-domb, 126. Lickóvadamos–Lickó-hegy, 129. Magyarkeszi–Gubarci tető, 130. Magyarszerdahely–Homoki-dűlő, 131. Majs, 132. Majs–294 Kossuth Lajos Street, 133. Majs–Vuka Baba, 134. Mágocs, 135. Between Mernye and Somogyaszaló, 137. Muraszemenye–Aligvári mező, 138. Nagyatád–Simongát, 139. Nagygörbő–Várodtető, 140. Nagygörbő–Várodtető/Várhegy, 141. Nagykanizsa–Inkey kápolna, 142. Nagykanizsa–Palini halastó, 143. Nagykanizsa–Palin, 144. Nagykanizsa–Sánc, 145. Nagykónyi, 146. Nagykónyi, 147. Nagykónyi–Dózsa György Street, 148. Nagyszokoly, 149. Nagyvejké–Réti szántók, 150. Olasz–Luka-dűlő, 151. Oltár–Márkihegy, 152. Between Orci and Zimány, 153. Ordacsehi–Bugaszeg, 154. Ordacsehi–Kécsimező, 155. Ordacsehi–Kis-töltés, 158. Pamuk–Laskapuszta, 159. Pári, 160. Pellérd, 161. Petrikeresztúr, 162. Pécs–43–47 Jakabhegyi Road, 163. Pécs–Keleti-hegy, 164. Pécs–Makárhegy, 165. Pécs–Málom-lőtér, 166. Pécs–Nagyárpád, 167. Pécs–Üszögpuszta, 168. Pécsudvard–Babos-dűlő, 169. Pécsvárad, 170. Pincehely, 171. Pincehely, 172. Pincehely–Tamási útra-dűlő, 173. Polány, 174. Pókaszeptek, 175. Pusztaszemes, 178. Regöly, 179. Sand, 180. Ságvár–Ali rét, 181. Ságvár–Tömlőhegy, 182. Sármellék–Fenéki Road, 183. Sármellék–Between the road and the railway, 184. Sármellék–Zalavári-hát, 185. Sátorhely–Török-domb, 186. Sávoly–Nyírfássziget, 187. Sávoly–Simonsziget, 189. Sénye–Csippán, 190. Siklós–Göntér, 191. Simontornya, 192. Sióagárd–Leányvár, 193. Siófok–Balatonkiliti, 194. Somberek–Szőlő, 196. Somogygeszti, 197. Somogysszil–Alsómarosd, 198. Somogyvár–Kupavárhegy, 199. Somogyviszló–Bodonya, 200. Somogyzsitfa, 201. Somogyzsitfa–Szöcsénypuszta, 202. Söjtör–Rapát, 203. Söjtör–Telekalja, 204. Szakály, 205. Szakály–Kistavapuszta, 206. Szakály–Ürgevár, 207. Szava, 208. Szederkény, 209. Szegerdő–Legelői-dűlő, 210. Szegerdő, 211. Szemely–Poljanak–Török-domb, 212. Szentlőrinc–Melegoldal, 213. Szentlőrinc–Újhegy, 214. Szepetnek–Kispityer, 215. Szepetnek–Középtábla-dűlő, 217. Szökedencs–Cölömpös-árok, 218. Szőlősgyörök–Gombosalja I, 219. Szőlősgyörök–Homokbánya, 220. Szőlőskislak–Tömöri rét, 221. Szulimán–Temető, 222. Tamási, 223. Tamási–Adorján Újtelep, 224. Tamási–Szemcse, 225. Tamási–Szőlőhegy, 226. Taszár, 228. Tikos–Homokgödrök, 229. Tolna–Mözs, 230. Tolna–Mözs, 231. County Tolna, 232. Tolnanémedi–Nebojsza, 233. Toponár, 234. Vajta–Kisvajta puszta, 236. Villány–Virágos, 237. Vörs–Battyáni disznólegelő, 238. Vörs–Borzás, 239. Vörs–Máriaasszony-sziget, 240. Vörs–Nyíres-sziget, 241. Vörs–Papkert “A”, 242. Zalakoppány–Aszaltető, 243. Zalaszentmihály, 244. Zaláta–Heténye-dűlő, 245. Zamárdi, 246. Zamárdi, 247. Zamárdi–Bazsi-tanya, 248. Zamárdi–8 Csap Street, 249. Zamárdi–46 Fő Street, 250. Zamárdi–Kút völgyi-dűlő, 251. Zamárdi–Papdűlő, 252. Zamárdi–Szamárkö–Ácstanya, 253. Zamárdi–Bypass 65101, 254. Zók–Várhegy



## ***Region I. Southern Transdanubia***

(Counties Baranya, Somogy, Tolna and Zala; Figs 40–41)

The intensity of Early Bronze Age research in southern Transdanubia varied from region to region. Several important sites were excavated in County Baranya during the 1960s and 1970s. The investigation of the Somogyvár–Kupavárhegy settlement between 1972 and 1988 in County Somogy represented a major milestone, as did the identification of various smaller sites during the surveys conducted as part of the Little Balaton research project. Following a number of smaller excavations in County Zala during the 1960s, several Early Bronze Age settlements were explored more intensively during the 1970s and 1980s. The micro-region project in the Hahót Basin led to the excavation of a large Somogyvár–Vinkovci settlement at Börzönce between 1988 and 1993. The number of known sites, most of which were indicated by stray finds, and the assemblages brought to light in the course of smaller excavation in the earlier 20th century in County Tolna rose considerably after the field surveys conducted by István Torma in the Kapos–Koppány Valley in the early 1960s. Géza Szabó unearthed the finds of the earliest Nagyrév period at Dunaföldvár–Kálvária during the site's excavation begun in the late 1980s. The excavations preceding the construction of the Szekszárd bypass (Road M9) between 1995 and 1999 yielded a wealth of new information on the period and equally important data can be expected from the excavations preceding the construction of the M6–M60 and M7–M70 Motorways and the Kaposvár bypass.

### *County Baranya (Figs 40–41)*

Bóna assigned ten sites from County Baranya to the Somogyvár–Vinkovci culture in his 1965 study on the Early Bronze Age,<sup>1104</sup> at roughly the same time as Gábor Bándi uncovered about 10,000 m<sup>2</sup> of the Nagyrápád settlement near Pécs (166).<sup>1105</sup>

The findings of Ecsedy's excavations at Zók–Várhegy (254), Szava (207), and Lánycsók–Égettmalom-dűlő (123) in the late 1970s provided a secure foundation for the later course of Early Bronze Age studies in Hungary. The finds from Szava and Lánycsók have been published in full; in contrast, only the finds from the metal workshop of the Vučedol period and a small selection of the finds from Zók has appeared in print.

Stray finds of the Vučedol and Somogyvár–Vinkovci cultures have been known from Dunaszekcső since the late 19th century.<sup>1106</sup> Two sites could be identified in the area: the settlements on Várhegy (53) and Kálvária-hegy (52).<sup>1107</sup> The Várhegy site, underlying the ruins of the Roman

<sup>1104</sup> Bóna (1965a) 43–44: Erzsébet–TSZ major, Kétújfalu–Szentmihályfa, Kökény, Mágocs–Kispusztá, Pécs–Keleti-hegy, Pécs–Makárhegy, Pécs–Nagyrápád, Pécsvárad, Szentlőrinc–Melegoldal, Zók–Várhegy.

<sup>1105</sup> Only a small selection of the finds has been published, together with a discussion of the settlement's layout: Bándi (1973); *idem* (1979); *idem* (1980); *idem* (1981).

<sup>1106</sup> Kalicz had earlier assigned the finds from this site, housed in the Wosinsky Mór Museum in Szekszárd, to the Makó group: Kalicz (1968) 80, Fo. 67. The finds are in fact decorated sherds from vessels of the Vučedol–Zók and Somogyvár–Vinkovci cultures, cp. Ecsedy (1979a) 108, who assigned them to the Vučedol–Zók culture. However, the bowl with round, hollow foot fits in better among the Somogyvár–Vinkovci finds: cp. Csalog (1941) Taf. III. 10; Kulcsár (1999a). The finds from the Dunaszekcső–Várhegy site, which had earlier been assigned to the Somogyvár culture, have more recently been linked the proto-Nagyrév period: Szabó (1992) 83.

<sup>1107</sup> Bándi (1979) 70, Sites 5 and 6. The finds from Dunaszekcső–Várhegy were published by Ecsedy, but without a distinction between the finds from Várhegy and Kálvária-hegy, and he described the finds collected by Mór Wosinsky at the close of the 19th century as originating from another site: Ecsedy (1985) 89, note 4. Bándi linked the stray finds collected in the late 19th century deposited in the Janus Pannonius Museum



military fort of Lugio on the loess ridge overlooking the Danube, was investigated by Valéria Kovács and Borbála Maráz in 1974;<sup>1108</sup> however, most of the finds from this site were collected by György Csanády, a physician from Bátaszék, when the loess bank collapsed.

In his overview of the Early Bronze Age sites in County Baranya in 1979,<sup>1109</sup> Bándi listed twenty-four sites identified during field surveys and on the basis of stray finds in addition to the already known ones. Interest in the region's Early Bronze Age waned from the 1980s and few studies have been published since then.<sup>1110</sup>

A glance at the map of sites in County Baranya reveals that the known sites show a concentration in the Pécs area, which can in part be explained by the natural attraction of the Pécsi-víz Stream and in part by the disproportionate nature of research. Most of the known sites lie in the southern foreground of the Mecsek Mountains, among the Baranya Hills and in the plainland extending along the Danube. Very few sites have been identified along the Drava and in the northern part of the Mecsek Mountains.

The two major sites by the northern fringes of the Baranya Hills between the Mecsek and the Villányi Mountains are Zók-Várhegy and Pécs-Nagyárpád, while stray settlement finds are known from Keszü (111), Kökény (121), Kökény-Kökénypuszta (122), Kozármisleny (120), Pellérd (160), Pécs-Málom (165), Pécsudvard (168), and Szemely-Poljanak (211). The stray vessel finds from Pécs-Makárhegy (164) by the southern foot of the Mecsek Mountains north of the Pécsi-víz Stream suggest a larger settlement. Other stray finds are known from Pécs-Jakabhegyi Road (162), Pécs-Keleti-hegy (163) and Pécs-Üszögpuszta (167). An assemblage of several vessels was found at Pécsvárad (169), on the southern edge of the eastern Mecsek Mountains. The culture's presence in the southerly areas of the Baranya Hills is indicated by the Szava settlement and the stray finds from Baksa-Kopárdűlő (5).

While several stray finds from Ivánbattyán (80), Kisjakabfalva (114) and Villány (236) reflect an occupation in the northern foreland of the Villány Mountains, evidence from the regions to the south (Siklós-Göntér [190]) and the Drava area is scanty (Zaláta-Hetenye-dűlő [244]). The apparent lack of sites along the Drava can be explained by the fact that the area lay near the border with Croatia and was thus less accessible to research. In addition to Olasz-Luka-dűlő (150), Szederkény (208) and Geresd (64), another site in the stream valleys of the eastern Baranya Hills is the one at Erzsébet (56), which yielded inconclusive evidence for a Somogyvár-Vinkovci burial.

Approaching the Danube Valley, the settlement at Lánycsók-Égettmalom lies on the plainland, while a handful of stray finds, among them metal artefacts, indicate the sites at Sátorhely (185) and in the Majs area (131–133). Additional sites are known from the Dunaszekcső area to the north (Dunaszekcső-Kálváriahegy, Dunaszekcső-Várhegy, Somberek [194]). Stray finds from Boda (32), the Szentlőrinc area (212–213) in the western foreland of the Mecsek Mountains, from Kétújfalu (113) in the county's westerly areas, and from Boldogasszonyfa (33), Csertő (40), Somogyviszló (199) and Szulimán (221) in the valley of the Almás Stream provide evidence for other settlements. The northernmost site at Mágocs (134) is part of the settlements in the Völgység region.

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in Pécs to the Várhegy site and the ones in the Wosinsky Mór Museum in Szekszárd to the Kálvária-hegy site: Bándi (1979) 70. Since there was no possibility for a closer identification of the sites in County Baranya, Várhegy and Kálvária-hegy are here treated as two different sites.

<sup>1108</sup> *Ecse*dy (1985).

<sup>1109</sup> Bándi (1979).

<sup>1110</sup> *Ecse*dy (1990); *idem* (1994a); *idem* (1994b). Cp. Versend (Site M60/B094): settlement of the Zók–Vučedol culture: Nagy (2007) 23.



Only one single burial is known from the county. Quoting information from Attila Kiss, Bóna mentions an inhumation burial from Erzsébet (56) and the biconical handled jug found in the grave.<sup>1111</sup>

The settlements are indicated by mostly stray finds, few of which have been published (two notable exceptions being the material from Dunaszekcső–Kálvária-hegy and Várhegy). Most were collected during various field surveys.<sup>1112</sup> The finds and findings of the excavations at Lánycsók and Szava have been published in full, while only a selection of the finds from Pécs–Nagyárpád and Zók–Várhegy have appeared, and several smaller settlements, such as the one at Pellérd, are still unpublished.

A few sites are marked by finds of intact vessels, most likely indicating the presence of a settlement. These include the two flasks from Kétújfalu–Szentmihályfa, a handled jug and a handled mug with an incised linear pattern from Pécs–Makárhegy, and a pot, a handled jug, a bowl and a small mug from Pécsvárad. Unpublished intact vessels (jugs, mugs, flasks) and vessel fragments marking settlements are known from Boldogasszonyfa, Csertő–Szőlőhegy, Kökény, Majs–294 Kossuth L. Street, Majs–Vuka Baba, between Mágocs–Kispusztá and Falugyörgyi, Pécs–Keleti-hegy, Szederkény, Szentlőrinc–Melegoldal and Szulimán.

A large interior decorated bowl, which can be dated to the late Vučedol period in view of its ornamentation, has been variously described as coming from Zók–Várhegy<sup>1113</sup> and Pécs–Nagyárpád.<sup>1114</sup> If originating from the latter, it would provide important evidence for dating the settlement's early occupation.

The artefacts reflecting the spread of metallurgy in the Early Bronze Age include shaft-hole axes (Majs: 131) and the moulds used for producing them. One of the earliest (Vučedol) assemblages in this respect is the assemblage from Zók–Várhegy; a mould fragment for a shaft-hole axe and a crucible are known from Pécs–Nagyárpád.<sup>1115</sup> The find contexts offer additional information on the metallurgy of the late Vučedol/early Somogyvár–Vinkovci period. Two other finds must also be mentioned: a flat bronze axe from Majs–Vuka Baba (133) and a trapezoidal flat axe from Szemely–Poljanak–Törökdomb (211).

#### *County Somogy (Figs 40–41)*

The culture's eponymous site at Somogyvár–Kupavárhegy (198) lies in County Somogy. In his 1965 study, Bóna assigned two other sites to the culture (Kéthely–Baglyas domb [112] and Nagyatád–Simongát [138]), both of which had yielded intact vessels. Even though there has been a welcome

<sup>1111</sup> Bóna (1965a) 43. Bándi apparently interpreted the same finds as representing one of the culture's settlements: Bándi (1979) 70; cp. *Ecsedy* (1979a) 104, Fo. 28; *Bondár* (1995) 251. The grave and its finds are still unpublished.

<sup>1112</sup> Baksa–Kopárdűlő (5); Boda–Nyafastó-dűlő (32); Geresd–Római temető (64); Ivánbattyán–Döggút (80); Keszű–Berekalja (111); Kiszakabfalva (114); Kozármisleny–Öregszőlődomb (120); Kökény–Kökénypuszta (122); Olasz–Luka-dűlő (150); Pécs–43–47 Jakabhegyi Road (162); Pécs–Málom-lőtér (165); Pécs–Üszögpuszta (167); Pécsudvard–Babos-dűlő (168); Sátorhely–Törökdomb (185); Siklós–Göntér (190); Somberek–Szőlő (194); Somogyviszló–Bodonya (199); Szemely–Poljanak–Törökdomb (211); Szentlőrinc–Újhegy (213); Villány–Virágos (236); Zaláta–Heténye-dűlő (244).

<sup>1113</sup> Bándi (1979) 50.

<sup>1114</sup> Bándi (1973) Pl. III.

<sup>1115</sup> Zók–Várhegy: *Ecsedy* (1983a); Pécs–Nagyárpád: *ibidem* 79, 83, Fig. 45, Pl. IX. 5 (mould fragment); *idem* (1990) 227, Fig. 10 (crucible).



rise in the number of the culture's sites,<sup>1116</sup> few major advances have been made in the culture's research.

The regional distribution of sites is directly proportionate to the extent an area has been researched: most of the known sites are concentrated in the Little Balaton region, along the southern shore of Lake Balaton, in the Somogyjád–Somogyvár area and on the left bank of the River Kapos. Five sites are known south–south-west of this broader region.

Burials and metal finds were lacking for a long time from the county's territory. Recent investigations at Szökedencs–Cölömpös árok (217) and Zamárdi (249) have yielded evidence for cremation burials, while the excavations at Kaposújlak–Várdomb (86) and Ordacsehi–Bugaszeg (153) brought to light inhumation graves. The clay mould fragments for a shaft-hole axe from the Kaposújlak settlement reflect early metalworking in the area.

The excavations indicate small, dispersed settlements with many pits, some of which are still unpublished. The stray finds, the field surveys and the finds assemblages from smaller rescue excavations allow the identification of several settlement sites.

Bóna listed a small handled mug from Balatonberény (6) among the finds of the Nagyrév culture.<sup>1117</sup> This site lies beyond the Nagyrév distribution proper, and even though Bóna correctly noted that the biconical pots of the Nagyrév culture can be derived from the Somogyvár mugs with curved neck, the form of this particular mug conforms to a rare, small variant of the Somogyvár mugs (Type I/14a).

The rise in the number of known sites can in part be explained by the finds in various private collections, such as the material collected by Dezső Piller in the Zamárdi area on Lake Balaton's southern shore, by Imre Stammer in the Somogyjád–Somogyvamos area and by Béla Eöry in the Kaposvár area (*Pl.* 30). The exact find spots cannot always be identified and thus the number of sites will undoubtedly be modified once these sites are precisely located.<sup>1118</sup>

Several smaller settlements sections with a few pits, ditches and rectangular buildings have been uncovered by the archaeologists working in the Kaposvár museum since the 1980s as part of the Little Balaton research project (Sávoly–Nyírfássziget [186], Sávoly–Simonsziget [187], Vörs–Battyáni disznólegelő [237], Vörs–Máriaasszony-sziget [239], Vörs–Nyíres-sziget [240]). They also identified a number of new sites based on stray finds (Szegerdő–Legelői-dűlő [209], Vörs–Borzás-Dél [238], Vörs–Papkert A [241]).<sup>1119</sup>

Aside from the small rescue excavations conducted at Ordacsehi–Kécsi mező (154), Polány (173; *Pls* 31–32), Ságvár–Ali rét (180), Szőlősgyörök–Homokbánya (219) and Szőlőskislak–Tömöri rét (220), there have been no large-scale investigations in the county's other parts and only a few stray finds are known from the areas south of Kaposvár (Kadarkút [81]); Barcs–Vukovár (27) along the Dráva and Beleg (31), Komlósd–Szőlőhegy (116) and Nagyatád–Simongát (138) along the Rinya.

Stray finds probably indicating settlements were collected from various sites identified during the field surveys preceding the construction of the M7 Motorway along Lake Balaton's southern shore. Most sherds were body fragments from pots with a brushed surface or pieces covered with smeared barbotine ("Schlickwurf"), rim fragments from pots with folded out rim and fragments of interior decorated bowls. While these sites yield little information of value, they do suggest that a

<sup>1116</sup> Bondár (1995) 252–254, lists eight sites. This number has risen to 96, following the re-assessment of the archaeological collection in the Rippl-Rónai Museum in Kaposvár, and the review of the archival data and the information provided by private collectors and the new excavations and field surveys.

<sup>1117</sup> Bóna (1963) 13, Pl. VIII. 10.

<sup>1118</sup> Cp. field surveys in 1999–2004: Fekete *et al.* (2005) 95, 111, Fig. 2, Map 1, Map 5.

<sup>1119</sup> Bondár (1996b); *idem* (2001).



much denser settlement network can be assumed along Lake Balaton's southern shore than earlier believed. The archaeological investigations preceding the construction of the M7 Motorway were resumed from 1994/1999 and their findings will undoubtedly enrich our knowledge of this period.<sup>1120</sup> Several smaller sites have already been identified (Balatonkeresztúr [10–11]; Balatonlelle [13–16]; Balatonőszöd [20]; Balatonszemes [22–24]; Fonyód [60–61]; Ordacsehi [153–155]; Zamárdi [250, 253]). A few scattered refuse pits were found at Balatonszemes–Szemesi Berek (24), Ordacsehi–Kécsi mező (154) and Ordacsehi–Bugaszeg (153). The finds from these settlements suggest that the sites were occupied during the period which can be correlated with a late phase (Layer B) of the Vinkovci settlement, marked by the appearance of vessels with folded out rim, a typological feature foreshadowing the Kisapostag culture.

Several settlements of the Somogyvár–Vinkovci culture were identified and investigated as part of the excavations preceding the construction of Road 61 bypassing Kaposvár (Kaposvár–Site 1 [93]). Outstanding among these is the site investigated at Kaposújlak–Várdomb (86), a fortified settlement ringed by multiple ditches, where finds reflecting the site's occupation during the late Vučedol, early Somogyvár–Vinkovci and early Kisapostag period were brought to light from the roughly five hundred excavated settlement features.

The principal site of the late Vučedol and the Somogyvár–Vinkovci cultures is the eponymous site at Somogyvár–Kupavárhegy (*Pls* 5–29). The site was excavated by Kornél Bakay between 1972 and 1988, where he found evidence for occupation during various prehistoric periods (Transdanubian Encrusted Pottery and Urnfield culture). Unfortunately, the prehistoric levels had been greatly disturbed by the church and the Benedictine abbey built in the 11th century and thus very few closed pits or intact levels could be observed. Even so, the settlement remains one of the most important sites of the late Vučedol and the Somogyvár–Vinkovci cultures in southern Transdanubia. The excavation of the site was resumed in 2002.

In addition to interior decorated bowls, the site's occupation during the late Vučedol period is indicated by few bowl and jug fragments, whose decoration is typical for the wares of the late Vučedol period. Vučedol types could not be distinguished in the household pottery (however, it must be noted that the mainly the decorated pottery finds were collected during the excavation). Beside the distinctive interior decorated bowls, the ceramics include also fragments of decorated handled jugs, whose best parallels can be quoted from the Croatian, rather than the Vučedol distribution in the Srem and Slavonia.

While biconical handled jugs with cylindrical neck and decorated shoulder (*Pl. 13. 11, Pl. 14. 1, Pl. 27. 2*) appear from the Vučedol B2 period,<sup>1121</sup> the fragments from Somogyvár have their best counterparts among the variants of the Vučedol C period in Croatia.<sup>1122</sup>

Handled jugs with a curved neck and a zig-zag pattern in the stab-and-drag style on the rim are represented by a few fragments at Somogyvár. One smaller mug has a double zig-zag line in the stab-and-drag style under the rim and a framed linear design on the handle (*Pl. 12. 9*); a vessel with cylindrical neck is decorated with a zig-zag line under the rim (*Pl. 25. 5*). This decorative style first appeared on vessels of the Vučedol B2 period,<sup>1123</sup> and remained popular until the late Vučedol period (Rudina type).<sup>1124</sup>

<sup>1120</sup> Kiss (2007a).

<sup>1121</sup> E.g. Ig: Korošec–Korošec (1969) Pl. 13. 3, Pl. 17. 1.

<sup>1122</sup> Veliko Trojstvo–Stari brijeg: Marković (1981) T. 2. 11.

<sup>1123</sup> E.g. Ig: Korošec–Korošec (1969) Pl. 17. 5, Pl. 53. 7.

<sup>1124</sup> E.g. Koprivnička Rijeka: Marković (1981) Pl. 12. 8.



Thin-walled bowls with a curved neck bearing a stab-and-drag linear pattern (*Pl. 14. 6*) too have their counterparts among the pottery finds from the Croatian settlements dating to the Vučedol C period.<sup>1125</sup> This type survived into period hallmarked by the Rudina type, a variant of the Somogyvár–Vinkovci culture dating to the late Vučedol period.<sup>1126</sup> Comparable finds include a bowl fragment from Döbrököz in Transdanubia (*Pl. 43. 1*) and a body sherd from a vessel with a stringhole lug from Gyulaj–Banyahegy (*Pl. 46. 7*). A handle fragment with vertical fluting (*Pl. 20. 6*) from Somogyvár, which is best matched by finds from the Koprivnička Rijeka settlement yielding pottery of the Rudina type, is another indication of contact with the south.<sup>1127</sup>

Other Vučedol/late Vučedol wares are represented by the fragments with a stab-and-drag linear pattern (*Pl. 10. 2, 5, 17–18*), a biconical jug decorated with a lime encrusted design made using the stab-and-drag technique on the shoulder (*Pl. 17. 7*), and the fragment of a clay plaque decorated with hatched triangles on one side (*Pl. 28. 4*).

Bowls decorated on both the exterior and interior were made during the Somogyvár–Vinkovci period too, although the designs on them were less elaborate compared to the preceding Vučedol/late Vučedol period. It is rather difficult to identify the bowls of the transitional period since the Somogyvár potters adopted several motifs together with certain elements of the ornamental technique, such as the stab-and-drag technique and excised patterns, both of which were then filled with lime. The decoration includes designs created through the alternation of empty areas and ones filled with zig-zag and cross patterns alongside hatched triangles and lozenges. The ceramic inventory from Somogyvár does not include intact bowls and thus possible correlations between the foot form and the interior design cannot be made.

The pieces from the late Vučedol period include interior decorated bowls with a simple design made up of a few motifs in their interior, such as a cross pattern outlined by the empty fields between triangles enclosed within a circle, a zig-zag pattern of alternating patterned and empty fields, a chequerboard pattern, a Maltese cross motif enclosed within a lozenge, and oblique bands filled with excised triangles. The rim of these bowls is sometimes decorated with zig-zag lines and stab-and-drag lines, the exterior with a design of framed hatched triangles and linear patterns (*Pl. 9. 19, Pl. 11. 8, Pl. 12. 4, Pl. 20. 1, Pl. 22. 7, Pl. 24. 3, Pl. 26. 10, Pl. 29. 1*).

Bowl fragments with a more elaborate and carefully made, lime encrusted excised and stab-and-drag design can also be assigned here (*Pl. 13. 9, Pl. 15. 1–2, Pl. 17. 5, Pl. 23. 2–3, Pl. 27. 1, 3–4, Pl. 28. 1–3*), as can a few foot fragments, such as a low, solid cross shaped foot decorated with hatched triangles along the edges and a cross motif in the centre (*Pl. 11. 1*). Other pieces include a low, solid cross shaped foot (*Pl. 26. 8*) and a hollow cross shaped one (*Pl. 14. 5, Pl. 22. 3, Pl. 23. 8, Pl. 26. 5–7*).

The bowls of the Somogyvár–Vinkovci period are the pieces decorated on both the interior and exterior (*Pl. 11. 4, 9, Pl. 13. 6, Pl. 14. 10, Pl. 15. 7, 9, Pl. 16. 4–5, 9, Pl. 17. 3, 11, Pl. 18. 2, Pl. 19. 1, 4–5, Pl. 20. 3, 5, Pl. 21. 5–6, Pl. 24. 5, Pl. 25. 11–12, Pl. 26. 1–4, 9, Pl. 29. 2, 5*). Some fragments come from bowls decorated with a rather simple design of a rough zig-zag pattern (*Pl. 16. 3*), a chequerboard pattern (*Pl. 21. 3, Pl. 22. 8*), clumsy copies of the cross design combining patterned and empty field enclosed within a circle (*Pl. 15. 8, Pl. 16. 10, Pl. 25. 3, Pl. 29. 4*) and copies of a similar Maltese cross design enclosed within a lozenge (*Pl. 18. 1, Pl. 29. 3*). Bowls with a round, hollow foot, both the decorated and undecorated varieties, are generally assigned to the Somogyvár–

<sup>1125</sup> Apatovac: *Marković* (1981) Pl. 5. 7, 9.

<sup>1126</sup> Koprivnička Rijeka: *ibidem* Pl. 11. 5.

<sup>1127</sup> *Ibidem* T. 8. 2.



Vinkovci group (*Pl. 9. 12, Pl. 12. 10, Pl. 14. 2, Pl. 23. 7, 11, Pl. 24. 7*), although a few hollow cross shaped pieces have been found on the culture's early settlements, for example at Polány (*Pl. 31. 3*).

The ceramic assemblage from the Somogyvár–Kupavárhegy settlement clearly shows that it is one of the key sites of the Early Bronze Age in Transdanubia, despite the fact that much of the pottery was unstratified. It seems likely that Vučedol groups in the culture's northern distribution advanced as far as the southern shore of Lake Balaton and thus the major settlements of the Vučedol culture, most of which were later occupied by Somogyvár–Vinkovci communities, determined the trajectory of later development at the turn of the Late Copper Age and the Early Bronze Age.

#### *County Tolna (Figs 40–41)*

County Tolna has been variously described as falling into the Makó–Kosihy–Čaka, Somogyvár–Vinkovci, proto-Nagyrév and Nagyrév distribution during the Early Bronze Age 1–2. The finds discovered more recently, most of which are stray finds, and the re-evaluation of earlier assemblages similarly made up of stray finds, indicates that sites of the late Vučedol culture occur north of the Dunaszekcső–Mecsek line, i.e. in the county's southerly and westerly regions (e.g. Döbrököz–Tüzköves [49] and Gyulaj–Banyahegy [73]). With its colourful patchwork of Early Bronze Age cultures, the finds from this region could be vital for the period's internal chronology, were it not for the stray nature of the finds. For the time being, however, we can merely document the presence of various cultures, without drawing too far-reaching conclusions.

None of the currently known sites can be unequivocally be assigned to the Makó–Kosihy–Čaka culture in southern Transdanubia.

In his 1965 study, Bóna assigned four sites to the Somogyvár group: the settlement at Lengyel, where several distinctive vessels had been found, and the sites at Gerjen–Váradpuszta, Szedres (today Sióagárd)–Gencspuszta, and Szekszárd, where flasks and handled jugs had come to light.<sup>1128</sup> An assemblage of seven vessels discovered at Nagyvejke (149) too marked a site of the Somogyvár culture. In addition to these five sites, Ecsedy included Simontornya (191) and Regöly (178) among the culture's sites, based on finds of interior decorated bowls.<sup>1129</sup> In a recent overview of the Early Bronze Age in southern Transdanubia, Bondár assigned five sites to the Somogyvár–Vinkovci culture.<sup>1130</sup>

During his field surveys in the Kapos and Koppány Valleys in the early 1960s, Torma identified about twenty-five Early Bronze Age sites, most of which yielded indistinct pottery.<sup>1131</sup> The number of known sites increased after the small-scale rescue excavation conducted by Mihály Köhegyi at Dombóvár (44) in 1962 and the “Zók” burials uncovered by Attila Gaál on the outskirts of Dombóvár–Fehérhidi-dűlő (45) in 1976.

Recent excavations have suggested a new interpretation for the cultural attribution of stray pottery assemblages containing fragments of flasks, which had earlier been assigned to the Somogyvár–Vinkovci culture. Szabó distinguished six Bronze Age occupation levels at the Sióagárd–Gencs site during his excavation of the settlement in the late 1980s.<sup>1132</sup> The finds from the settlement could be dated to the proto-Nagyrév and the Nagyrév period. A stray jug from this site, earlier assigned to the

<sup>1128</sup> Bóna (1965a) 42–43.

<sup>1129</sup> Ecsedy (1979a) 104, 108.

<sup>1130</sup> Bondár (1995) 251–254: Gerjen–Váradpuszta, Lengyel, Nagyvejke, Szedres–Gencspuszta, Szekszárd.

<sup>1131</sup> I would here like to thank István Torma for his generous help and for kindly allowing me to study the finds from these sites. Cp. Torma (1964).

<sup>1132</sup> Szabó (1992) 69.



Somogyvár group,<sup>1133</sup> can be regarded as a ware of the earliest Nagyrév period in the light of the finds uncovered during the excavation. At the same time, the settlement's earliest occupation level yielded cylindrical flasks of the type that became widespread during the Somogyvár–Vinkovci period in Transdanubia and also appeared in neighbouring areas.<sup>1134</sup> The control excavation at Gerjen–Váradpuszta in 1987–1988 confirmed the assumption that flasks of this type, earlier regarded as a hallmark of the Somogyvár group, were not uncommon during the proto-Nagyrév and the early Nagyrév period.<sup>1135</sup> The flasks found earlier at Gerjen<sup>1136</sup> can thus be linked to the proto-Nagyrév period. In the lack of associated finds, the cylindrical flask from Szekszárd<sup>1137</sup> can equally well be assigned to both the Somogyvár–Vinkovci and the related proto-Nagyrév complex.

The number of prehistoric sites in County Tolna rose again following the publication of the local history monograph of Bátaszék<sup>1138</sup> and Bőlske.<sup>1139</sup> György Csanády had devoted several decades to collecting finds, mostly in the Bátaszék area, while Antal Csiszér has laboriously surveyed the Aparhant area (Nagyvejke–Kisvejkei magaslat, Nagyvejke–Réti szántók-dűlő [149]; *Pls* 47–48). The finds collected by these two enthusiastic local historians have enriched our knowledge of the archaeology of these areas.

The Döbrököz–Tűzköves (49) site, first identified by Torma, yielded a rich ceramic assemblage and the mould of a shaft-hole axe in 1999 (*Pls* 43–44). A circular area on the hilltop overlooking the settlement was protected with a ditched enclosure, while the oval area adjoining it on the southern side was similarly protected with a ditched enclosure and ramparts (*Pl.* 43. 6). An ashy, burnt patch could be made out in the central enclosure on the aerial photographs taken by Zsuzsa Miklós.<sup>1140</sup>

Curiously enough, not one single control excavation has been conducted on any of the major Early Bronze Age sites known in the Kapos and Koppány Valleys and in the areas to their west, which were last excavated in the 19th century. Aside from the settlements lying beside the Danube and the Sió Rivers, none of the Early Bronze Age assemblages originates from secure contexts. The concentration of unexcavated sites in the Kapos and Koppány Valleys reflects the lack of serious research in these areas. North of Lengyel and Nagyvejke, the two key sites in the northern Völgyesség region, the number of known sites declines perceptibly in the Tolna Ridge (Gyöng [67]). The absence

<sup>1133</sup> A handled jug, H. 19 cm: *Wosinsky* (1896) Pl. LI. 2; *Bóna* (1965a) Fig. 1. 1.

<sup>1134</sup> For earlier stray finds of this type, cp. a cylindrical flask with two small handles (H. 18 cm, WMM inv. no. B.933.123.1 = 85.251.1; *Wosinsky* [1896] Pl. LI. 3; *Bóna* [1965a] Fig. 1. 2, Pl. XV. 20); for other similar flasks from the same site, cp. *Szabó* (1992) 80, Pl. LIV. 2, Pl. LV. 12, Pl. LXXI. 6, Pl. LXXVII. 3.

<sup>1135</sup> Earlier stray finds of this type from the excavations of Mór Wosinsky in 1890 and 1892 include a cylindrical flask with two handles (*Wosinsky* [1896] Pl. XXIX. 3; *Bóna* [1965a] 43, Fig. 1. 4); a cylindrical flask with two small handles (*Wosinsky* [1896] Pl. XXIX. 4; *Bóna* [1965a] 43, Fig. 1. 5); fragment of the lower part of a flask (*Szabó* [1992] Pl. LXXIII. 1); fragment of a two handled flask (*ibidem* Pl. LXXIII. 2); fragment of the lower part of a flask: *ibidem* Pl. LXXIII. 3. Other finds include a flask found inside a Nagyrév jug on the floor of House 3 in Level 4 of Trench VI (*ibidem* 76, Pl. XXXVIII. 11, Pl. LXVII. 1); a flask (*ibidem* 76, 80, Pl. XXXVIII. 9); fragment of the lower half of a flask from House 2 of Level IV in Trench VI, a flask from Level 3 (*ibidem* 75); and two stray flask from the side of Wosinsky's Trench C: *ibidem* 80, Pl. XXXVIII. 13–14.

<sup>1136</sup> *Bóna* (1965a) 43, Fig. 1. 4–5.

<sup>1137</sup> *Wosinsky* (1896) 120, Pl. XXIX. 5; *Bóna* (1965a) 43, Fig. 1. 3.

<sup>1138</sup> *Csanády* (1997).

<sup>1139</sup> *Szabó–Szécsi* (1996).

<sup>1140</sup> *Miklós* (2007) 57–60. The site was surveyed and photographed by Zsuzsa Miklós of the Archaeological Institute of the Hungarian Academy of Sciences. I am greatly indebted to her for sharing the findings of her survey.



of Somogyvár–Vinkovci (and Makó–Kosihy–Čaka) sites east of the Sió Valley is striking (the single notable exception being the Sióagárd–Leányvár site [192]).

Bóna believed that the intact vessels from Nagyvejke had been the grave goods of a burial.<sup>1141</sup> Even though intact vessels continued to be found at the site since the 1970s, a control excavation has still not been conducted. Csiszér, who has been regularly monitoring the site, did not observe any ashes, bone fragments or clusters of vessels suggesting burials. A similar assemblage of vessels, indicating a possible burial, came to light on the outskirts of Dombóvár, where Kőhegyi found three interior decorated bowls, which could be assembled and restored from their fragments (*Pl.* 42). Gaál mentions burials found in another area near Dombóvár (Fehérhidi-dűlő), but nothing is known about their grave goods.

Very few settlements have been excavated in County Tolna. One of these is the Tamási–Szőlőhegy (225) site, where a sunken dwelling was uncovered. The unexcavated sites include major fortified hilltop settlements, such as Döbrököz–Tüzköves and Gyulaj–Banyahegy, which, judging from the stray finds, were occupied during both the late Vučedol and the early Somogyvár–Vinkovci periods. Another key site lies at Lengyel (124). The finds unearthed by Wosinsky in the late 19th century do not indicate the settlement of a late Vučedol community on the site, and neither does the hilltop settlement at Nagyvejke–Réti szántók-dűlő (149) seem to have been occupied during that period. Stray finds indicating a settlement can be quoted from several sites: fragments of interior decorated bowls from Dombóvár–Gunaras (46), Regöly (178), Simontornya–MÁV sandpit (191), an unknown site in County Tolna (231) and a small handled mug from Tamási (222) (*Pl.* 52).

The mould for a shaft-hole axe discovered at Döbrököz–Tüzköves (*Pl.* 43. 2) can equally well be linked to the late Vučedol and the Somogyvár–Vinkovci period. The shaft-hole axe from Nagyvejke–Réti szántók-dűlő (*Pl.* 47. 5) can be dated to a slightly later period. The hoard of six shaft-hole axes and three chisels found at Dunakömlőd<sup>1142</sup> in the Danube Valley is uncertain owing to the region's cultural diversity and the fact that neither late Vučedol, nor Makó–Kosihy–Čaka or Somogyvár–Vinkovci sites have yet been identified in the area. The colonisation of the area can probably be linked to the gradual infiltration of proto-Nagyrév groups during the late Somogyvár–Vinkovci period at the onset of the Early Bronze Age 2, even though the artefacts themselves do not support this date since they represent types current during the Early Bronze Age 1.

The finds and sites of the proto-Nagyrév period in County Tolna have recently been reviewed in detail Szabó.<sup>1143</sup> The sites at Dunaföldvár–Kálváriadomb,<sup>1144</sup> Gerjen–Váradpuszta and Sióagárd–Gencs can certainly be assigned here, as can a few smaller assemblages exhibiting similar proto-Nagyrév/early Nagyrév traits.

In 1966, Gyula Rosner collected Early Bronze Age pottery sherds from a pit at Simontornya–Sióhíd, which can be dated to the earliest Nagyrév period (*Pl.* 49).<sup>1145</sup> A few pits of a proto-Nagyrév/early Nagyrév settlement were uncovered at Tolna–Mözs (229–230) during the salvage excavation of an extensive prehistoric site between 1995 and 1999 preceding the construction of the northern

<sup>1141</sup> Bóna (1972) 6.

<sup>1142</sup> Roska (1957). WMM inv. no. B.12.933.1–8.

<sup>1143</sup> Szabó (1992). The term proto-Nagyrév was coined by Bóna for describing the finds from Kötörés: Bóna (1963) 20.

<sup>1144</sup> Another site perhaps lies at Dunaföldvár–Kendergyár, where a few Early Bronze Age pits were discovered at a depth of 1.8 m: Rosner (1977).

<sup>1145</sup> Simontornya–Sióhíd (WMM inv. no. 67.347.1–36). The finds included a handled jug (H. 10.2 cm; *Pl.* 49. 1, in this volume), various jug fragments (*Pl.* 49. 4, 12, in this volume), rim fragments of bowls (*Pl.* 49. 2–3, 5–7, in this volume), rim fragments of pots (*Pl.* 49. 8–11, in this volume), body fragments of scored pots (*Pl.* 49. 13–15, in this volume).



Szekszárd bypass road (*Pls* 50–51).<sup>1146</sup> A vessel with asymmetrical handles (*Pl.* 51. 2) has its best counterparts among the proto-Nagyrév assemblages from the Srem region.

The tell settlement at Bölske–Vörösgyír is one of the many sites which can be linked to the later Nagyrév period in this region. In addition to a handful of stray finds<sup>1147</sup> and the still unpublished material from the site's excavation,<sup>1148</sup> the pottery collected in the tell's broader environs, such as a cylindrical flask,<sup>1149</sup> too offers important clues for the settlement's early occupation, indicating that the Bölske settlement can be fitted into the chain of earliest (proto-)Nagyrév settlements in the Danube Valley.<sup>1150</sup>

A few other stray finds can similarly be assigned to the early Nagyrév period. These include a biconical pot from Simontornya,<sup>1151</sup> a decorated biconical vessel from Újdombóvár,<sup>1152</sup> a pot from Szekszárd–Jajdomb<sup>1153</sup> and two handled mugs from Harc.<sup>1154</sup> Stray finds, such as the vessels from Alsónyék,<sup>1155</sup> Decs,<sup>1156</sup> Dunaföldvár<sup>1157</sup> and Simontornya,<sup>1158</sup> have been collected on all the major tell settlements of the later Nagyrév period along the Danube and the Sió (Bölske–Vörösgyír, Dunaföldvár–Kálvária, Gerjen–Váradpuszta, Sióagárd–Gencs).

### *County Zala (Figs 40–41)*

The earliest known Early Bronze Age sites in County Zala lie in the Zala Valley (Kemendollár [104], Pókaszeptek [174],<sup>1159</sup> Zalakoppány [242]) and to its east (Nagygörbő–Várhegy [139], Nagygörbő–Várodteő [140], Sénye [189]), and in the Keszthely area (Keszthely–Alsódobogó [106], Keszthely–Fenékpuszta [110], Keszthely–Halászcserda [107], Keszthely–Lehenrét [108], Keszthely–Újdűlő [109], Sármellék area [182]). In his 1965 study, Bóna assigned four sites to the Somogyvár–Vinkovci culture (Kemendollár, Keszthely–18. sz. vasúti őrház (Keszthely–Fenékpuszta) and Pókaszeptek,

<sup>1146</sup> Tolna–Mözs, Site M9/II, Feature 695: rim fragments of various bowls (*Pl.* 50. 1–2, 4, in this volume), fragment of a small pot (*Pl.* 50. 3, in this volume), fragment of a storage jar (*Pl.* 50. 5, in this volume). Site M9/III, Feature 15: handled mug (*Pl.* 51. 1, in this volume); Feature 264: handled jug (*Pl.* 51. 4, in this volume); Feature 268: fragment of a pot (*Pl.* 51. 3, in this volume).

<sup>1147</sup> *Wosinsky* (1896) Pl. LXXXVII; *Bóna* (1965a) 18, Pl. XVII. 1–18, 22–23.

<sup>1148</sup> The finds from the Bölske–Vörösgyír tell settlement were analysed by Ildikó Poroszlai. I would here like to thank her for kindly making the data in her unpublished doctoral dissertation available to me: *Poroszlai* (1992a); *idem* (1992b).

<sup>1149</sup> *Szabó–Szécsi* (1996) 106, Fig. 3. 4.

<sup>1150</sup> Other stray finds are known from an unknown find spot in County Tolna (*Pl.* 52. 3) and the Baracs area (H. 12 cm, WMM inv. no. B.109.933.2, *Pl.* 52. 8).

<sup>1151</sup> *Bóna* (1963) 13, Pl. VIII. 13.

<sup>1152</sup> *Ibidem* 13, Pl. VIII. 14.

<sup>1153</sup> *Ibidem* 14, Pl. IX. 6.

<sup>1154</sup> *Wosinsky* (1896) Pl. LIII. 9, Pl. LXXXVII. 3.

<sup>1155</sup> *Bóna* (1963) 18, Pl. XV. 16.

<sup>1156</sup> *Ibidem* Pl. XVII. 19.

<sup>1157</sup> *Ibidem* 18, Pl. XVII. 20.

<sup>1158</sup> *Ibidem* 18, Pl. XVII. 21, Pl. XVIII. 17.

<sup>1159</sup> In his monograph on the Early Bronze Age, Kalicz listed Pókaszeptek among the sites of the Makó culture, quoting the Zók type pottery sherds from the site in the collection of the Rippl-Rónai Museum in Kaposvár: *Kalicz* (1968) 80, Fo. 66. These sherds can no longer be found in the museum's collection, and the site is therefore assigned to the Somogyvár–Vinkovci culture in view of the other finds known from this site: *Bóna* (1965a) 42, Pl. XIV. 8, 12; cp. also *Ecsedy* (1979a) 108.



Sármellék–Fenéki Road).<sup>1160</sup> One and a half decades later, Ecsedy added the Nagygörbő settlement to this list.<sup>1161</sup>

Gyula Nováki excavated smaller portions of the Kemendollár–Várdomb settlement in 1952 and of the Nagygörbő–Várodtető site in 1961, the latter a fortified hilltop settlement. The first systematic field surveys of the Hungarian Archaeological Topography project were conducted in the Keszthely and Tapolca districts of County Veszprém (MRT 1) in the 1950s, followed by the Veszprém district (MRT 2) and the Devecser and Sümeg districts (MRT 3).<sup>1162</sup>

Róbert Müller identified three new sites during his field survey of the Göcsej area in the late 1960s (Becsölgye–Barabásszeg [30], Gombosszeg [65], Petrikeresztúr [161]). He excavated a pit, which he interpreted as a pit-dwelling, at Keszthely–Halászcsernye (107) in 1973.

László Horváth identified several new Early Bronze Age sites during his field surveys in the Nagykanizsa area (Galambok–Öreghegy [63], Homokkomárom–Templom [78], Nagykanizsa–Palini halastó [142], Oltárc–Márkihegy [151], Sand [179], Szepetnek–Kispityer [214], Szepetnek–Középtábla-dűlő [215]) and he also excavated the sites at Magyarszerdahely–Homoki-dűlő (130) and Nagykanizsa–Inkey kápolna (141).<sup>1163</sup> Kalicz investigated the settlement sites at Nagykanizsa–Sánc (144) and Letenye–Szentkeresztomb (125), the latter lying in the Mura Valley.

Several smaller sites, such as Balatonmagyaród–Hídvégpuszta (17) and Balatonmagyaród–Szarkavári sziget (18) were investigated in the mid-1980s as part of the Little Balaton archaeological project preceding the ecologic reconstruction of the Little Balaton region begun in 1979.<sup>1164</sup>

A research team made up of archaeologists from the Archaeological Institute of HAS and the Göcseji Museum in Zalaegerszeg surveyed the Hahót Basin between 1986 and 1994,<sup>1165</sup> followed by a similar survey in the Kerka Valley, the westernmost plainland west of Lake Balaton (1995–1998).<sup>1166</sup> Both research projects shed new light on the prehistory of the county's little investigated central and westerly regions. Between 1988 and 1993, Bondár uncovered thirty pits of the settlement at Börzönce–Temetői-dűlő (36). The single extensive Early Bronze Age site, contemporaneous with the one at Börzönce, was identified at Kissziget–Temetődomb (115), south-east of the Kerka Valley. The scarce occupation of the Kerka Valley in the Late Copper Age (no more than a handful of Baden settlements were identified) and in the Early Bronze Age can in part be explained by the nature of the sites: it is often difficult to identify the shifting, less intensively settled farmstead-like settlements occupied for no more than a decade or so for they leave fewer traces in the archaeological record.<sup>1167</sup> Traces of Late Copper Age and Early Bronze Age occupation were also scarce in Slovenia<sup>1168</sup> and Styria,<sup>1169</sup> the two regions adjoining County Zala.

<sup>1160</sup> Bóna (1965a) 42.

<sup>1161</sup> Ecsedy (1979a) 104–105.

<sup>1162</sup> The western portion of the Keszthely and Sümeg districts were later administratively incorporated into County Zala.

<sup>1163</sup> Horváth (1994) 95–97.

<sup>1164</sup> Bondár (1996b).

<sup>1165</sup> Bondár–Kiss (2007).

<sup>1166</sup> Bánffy (1998) 9–17.

<sup>1167</sup> Bondár (1998) 22–23. Another reason for the apparently fewer sites in the Kerka Valley is that the remains of settlements and campsites are less likely to be detected in areas currently covered by woodland and marshland, which have few areas suitable for cultivation.

<sup>1168</sup> Šavel (1991) 28; *idem* (1996) 20; *idem* (2005); *idem* (2006).

<sup>1169</sup> Kramer (1996). Cp. Wildon–Scloßberg: Kramer (1989) 28–30.



Drawing from the findings of recent research, Bondár listed twenty-seven sites.<sup>1170</sup> The number of the culture's sites is higher, totalling forty-one, if the newly identified sites are added to this number.<sup>1171</sup> The distribution of sites in this region shows a correlation with the extent to which a particular area has been researched, as well as with the one-time environment (the sites lying in the Little Balaton region, along the banks of the Zala and Marcal Rivers, and in the smaller stream valleys of the Zala Hills). The size of "blank" areas is gradually diminishing.

The number of settlement sites is considerably higher. Similarly to other regions, several stray finds indicate additional settlements: Bak–Rózsa Street (4), Balatonhídvégpuszt (Zalavár) (9), Becsvölgye–Barabásszeg-68 Fő Street (30), Gombosszeg (65), Kemendollár–Várdomb (104), Keszthely–Újdűlő (109), Nagykanizsa–Palini halastó (142), Petrikeresztúr (161), Pókaszepetk (174), Sand (179), Sármellék–Fenéki Road (182), Sármellék (183), Sármellék–Zalavári-hát (184), Sénye–Csippán (189), Szepetnek–Kispityer (214), Szepetnek–Középtábla-dűlő (215) and Zalakoppány–Aszaltető (242).

In addition to smaller sites indicated by a few pits, such as Balatonmagyaród–Hídvégpuszt–déli rév (17), Balatonmagyaród–Szarkavári sziget (18), Keszthely–Halászcserda (107), Magyar-szerdahely–Homoki-dűlő (130) and Muraszemenye–Aligvári mező (137), two other sites must be mentioned here: Nagykanizsa–Sánc (*Pls 39–41*) and the settlement section investigated at Letenye–Szentkeresztomb (*Pls 36–38*). The more extensively investigated sites include the settlements at Börzönce and Nagykanizsa–Inkey kápolna. The settlement network of the Somogyvár–Vinkovci culture in this region included a few fortified settlements. The findings of the field surveys in the Nagykanizsa area furnished evidence for fortified hilltop settlements at Galambok–Öreghegy, Homokkomárom and Oltárc–Márkihegy. The single excavated fortified settlement is the one at Nagygyőr–Várodtető. The elaborate layout of this settlement is reflected by settlement remains on the northern slopes and flat terrace adjoining the central area.

There is evidence for two cremation burials from County Zala, both from the Keszthely area (Keszthely–18. sz. vasúti őrház/Fenékpuszt [110], Keszthely–Lehenrét [108]). Metalwork from this region is represented by a stray find of a Bányabükk type shaft-hole axe found at Keszthely–Alsódobogó (106) and a stray find of a Kozarac type shaft-hole axe from Lickóvadamos (126).

#### *Late Vučedol and early Somogyvár–Vinkovci settlements*

The above overview indicates that the currently known Vučedol–(Zók) sites north of the Drava are exclusively settlements. The earliest occupation is marked by the settlements of the Vučedol B1–B2 period, such as Dunaszekcső–Várhegy, Zók–Várhegy and perhaps Somogyvár–Kupavárhegy. Occupation in the late Vučedol (C) period was noted at Döbrököz–Tüzköves, Dunaszekcső–Várhegy, Gyulaj–Banyahegy, Lánycsók–Égettmalom, Somogyvár–Kupavárhegy and Zók–Várhegy, and possibly at Pécs–Nagyárpád.<sup>1172</sup> These settlements, which with the exception of the Lánycsók site were all established on well-defendable hilltops, are characterised by a rich

<sup>1170</sup> Bondár (1995) 250–254; *idem* (1998) 22, 28–29, Fig. 2; *idem* (2001) 71, Figs 2–3.

<sup>1171</sup> The number has risen to 41, following the new excavations of the M7–M70 motorway in 1999–2008, and field surveys.

<sup>1172</sup> Cp. *Ecsegy* (1979a) 107. The stray Vučedol–Zók finds appearing scattered farther to the north are interpreted as indicating the culture's contemporaneity, rather than as a record of an actual Vučedol presence: e.g. Koroncó–Galambostag (MKČ cat. no. 155), Győr–Gázgyár (MKČ cat. no. 119), Hidegség (MKČ cat. no. 124). Cultural impacts from various Vučedol-related Ljubljana groups can be assumed on the western fringes of the Carpathian Basin, reflected, for example, by the pottery sherds with late Vučedol type decoration from Sé–Malomi-dűlő (188).



assemblage of finds. A thick cultural deposit was unearthed at Zók, where the houses with plastered clay floor were repeatedly rebuilt. A settlement with similar houses from the Vučedol period can be assumed at Dunaszekcső-Várhegy (at least judging from the features visible in the profile of the loess bank). The Somogyvár-Kupavárhegy settlement was strongly disturbed and was therefore unsuitable for observations of this type. The observations made at Lánycsók suggest that smaller settlements, whose sole remains in the archaeological record are pits, had existed from the late Vučedol period onward, or were perhaps established at an even earlier date. The appearance of these smaller settlements can be linked to the appearance of the Somogyvár-Vinkovci population and the transformation of the lifeways, leading to the decline and eventual abandonment of the large Vučedol centres.<sup>1173</sup> The archaeological record reflects the appearance and spread of briefly occupied settlements with a simple layout and few defences during the early Somogyvár-Vinkovci period. While settlements with thick occupation deposits disappear, a few settlements on well defensible plateaus atop higher hills and mountains were established alongside the small, transient settlements.

Similarly to the culture's Syrmian and Slavonian distribution, little is known about the internal chronology of the Transdanubian settlements. Somogyvár-Vinkovci groups pursuing a different life-style first appeared on the southern Transdanubian Vučedol-Zók settlements. The occupation of the Szava and Börzönce settlements began at this time, or slightly later. In the lack of excavated sites and the fact that the finds from the archaeologically investigated sites are still mostly unpublished, little is known about the finer details of the shift in life-style.

The southern Transdanubian settlements occupied by both the Vučedol-Zók and the Somogyvár-Vinkovci culture include Zók-Várhegy, Dunaszekcső-Várhegy, Pécs-Nagyárpád, Lánycsók, Döbrököz-Tűzköves, Gyulaj-Banyahegy and Somogyvár-Kupavárhegy.

At Zók, the Somogyvár community settling on the plateau of the Várhegy after the Vučedol occupation enlarged the settlement to include the plateau's forefront.<sup>1174</sup> A Somogyvár-Vinkovci group occupied the Dunaszekcső-Várhegy site too, which had previously been intensively settled by a Vučedol community. However, little is known about how the two communities utilised the available space and whether there were differences between the extent of the occupied area as at Zók. Even though the finds from Pécs-Nagyárpád have not been published in full, it seems likely that a Somogyvár community established itself on the settlement after the late Vučedol period. A comparison of the find assemblages from the inner fort and the open settlement beside it will undoubtedly shed light on possible differences between the two settlement layouts. At Lánycsók, a section of the Somogyvár-Vinkovci settlement was uncovered in addition to the settlement features of the latest Vučedol period.

Settlements of the Vučedol-Zók culture can be found north of the Mecsek Mountains and along the Danube north of Dunaszekcső. The Döbrököz-Tűzköves site appears to have had a similar occupation history since the finds collected during the field surveys included both late Vučedol-Zók types (*Pl. 43. 1, Pl. 44. 1, 7*) and Somogyvár-Vinkovci wares (*Pl. 43. 2–5, Pl. 44. 9–14*), suggesting that the hilltop settlement with a small central plateau and the adjoining open settlement rising above the Kapos Valley were occupied during both periods. The site's importance is marked by a stray find of a mould for a flat shaft-hole axe, although the mould's cultural attribution is uncertain and can only be established after a control excavation. The Gyulaj-Banyahegy settlement was similarly occupied during both the Vučedol, the late Vučedol and the Somogyvár-Vinkovci periods (*Pls 45–46*).

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<sup>1173</sup> *Ecsedy* (1980) 97.

<sup>1174</sup> *Ecsedy* (1983a) 77; *idem* (1999).



Somogyvár–Kupavárhegy is the currently known northernmost Transdanubian settlement of the late Vučedol–Zók culture, suggesting that this population had advanced as far as the southern shore of Lake Balaton during the Early Bronze Age 1, at the time when the Makó–Kosihy–Čaka culture was still flourishing. Since most of the finds from the site's excavation could not be associated with a specific feature, the site's occupation can only be reconstructed along broad lines. The finds from the settlement include pottery from the Vučedol B2 and the Vučedol C periods, the latter best matched by the Ljubljana/Laibach and the northern Croatian Rudina type. The Vučedol distribution can thus be extended to the southern shoreline of Lake Balaton.<sup>1175</sup>

The settlement investigated at Börzönce occupies a prominent position among the southern Transdanubian sites. The finds indicate affinities with both the late Vučedol (Vučedol C) and the early Somogyvár–Vinkovci (Vinkovci A1) periods.<sup>1176</sup> The wagon model and the animal figurines, the first of their kind from Transdanubia, suggest possible contact with the Glina III–Schneckenberg group and other Early Bronze Age groups of Transylvania (Livezile, Zăbăla, and Soimuș groups). At the same time, there are remarkable affinities with the material from the Szava settlement too. The site has been assigned to the early Somogyvár–Vinkovci period based on the occurrence of interior decorated bowls.<sup>1177</sup> It must nonetheless be borne in mind that it is the style of interior decorated bowls that should be considered in dating, rather than their presence or absence. The issue of whether interior decorated bowls can indeed only be found in early Somogyvár contexts and do not occur later can only be resolved in the light of find assemblages with secure contexts. It would appear that in southern Transdanubia, the finds of the newly-arrived Somogyvár groups can only be securely identified on the settlements earlier occupied by Vučedol communities and on the independent, newly founded settlements. The examination of the currently known assemblages from sites of this type does not indicate a major change in the pottery wares parallel to the changes in settlement patterns, and neither can significant chronological differences be detected between the various settlements. It seems more likely that the differences between the Somogyvár sites in southern Transdanubia (e.g. Szava) and south-western Transdanubia (Börzönce, Nagykanizsa–Inkey kápolna, Nagykanizsa–Sánc and Letenye–Szentkeresztomb) were regional, rather than chronological in nature. These sites were all occupied by the earliest Somogyvár groups migrating to the region from the south at the close of the Early Bronze Age 1.

Bondár has argued that the Somogyvár–Vinkovci settlement pattern of small settlements and scattered burials can be taken as a reflection of a life-style based on seasonal migration<sup>1178</sup> and an economy based on stockbreeding and herding. However, similarly as in the case of the Makó–Kosihy–Čaka culture, there is no conclusive evidence for a pastoralist life-style. The small settlements and the field survey data indicating not too intensively occupied sites, as well as the low number of burials would indeed suggest that most settlements were occupied but briefly and that the livelihood of most communities was indeed based on crop cultivation and stockbreeding. At the same time, the overall picture reflected by the material culture must also be considered. The pottery wares making up the bulk of the culture's known inventory of finds reflect a stylistic and typological diversity. One possible explanation is that the known assemblages perhaps come from a period spanning several centuries and that there were regional differences in ceramic wares in addition to the shared traits. Another point which must be borne in mind is that there is no indication of a many-tiered settlement

<sup>1175</sup> Cp. Bóna (1992a) 16; Kalicz–Kalicz-Schreiber (1997) Abb. 1; *idem* (1999) Fig. 1.

<sup>1176</sup> Bondár (1995) 229.

<sup>1177</sup> Kalicz–Kalicz-Schreiber (1999) 84.

<sup>1178</sup> Bondár (1995) 235.



hierarchy and a settlement concentration among the communities of the emergent Early Bronze Age.

*The (Somogyvár–) proto-Kisapostag group*

It would appear that several regional groups evolved during the later Somogyvár–Vinkovci period. Although the basic ceramic inventory can be found on many sites, the differences between individual find assemblages are often quite striking and would warrant a different label. The sites from the late period (Early Bronze Age 2) include Balatonszemes–Szemesi berek (24), Ordacsehi–Bugaszeg (153) and Ordacsehi–Kécsi mező (154) on the southern shore of Lake Balaton, and Site 33 in the Kaposvár area (97), whose finds are matched by the material from Layers B1–B2 of the Vinkovci settlement. The changes in the ceramic style are best illustrated by the appearance of pots with doubly folded out rim and the practice of brushing pot surfaces, the latter a decorative element which appears neither in the early Somogyvár–Vinkovci period, nor in the subsequent Kisapostag culture. In this sense, the finds reflect a transitional period, which can perhaps best be described with the proto-Kisapostag label.

*The (Somogyvár–) proto-Nagyrév group*

One of the regional groups appearing at the close of the Early Bronze Age 2 is the (Somogyvár–) proto-Nagyrév group migrating northward along the Danube Valley from the Srem. The route of this population is marked by the settlements in the Danube and Sió Valleys, and the scatter of stray assemblages up to the Budapest area, as shown by the finds from the Békásmegyer cemetery.<sup>1179</sup> Groups related to the proto-Nagyrév group appear in the central and northern areas of the Danube–Tisza Interfluve (Kecskemét–Csukásér and Alsónémedi),<sup>1180</sup> as well as on the northern fringes of the Great Hungarian Plain (Jászdózsa). Yet another variant is represented by the Somogyvár–Ada group (304–314; *Fig. 43*).<sup>1181</sup> What we see at the close of the Early Bronze Age 2, then, is a colourful, but ever-changing kaleidoscope of new groups.

The presence of proto-Nagyrév communities related to the Somogyvár–Vinkovci groups, but differing in terms of their pottery wares and settlement patterns, can be documented in County Tolna, i.e. east of the River Sió. A chain of proto-Nagyrév settlements can be detected in the Danube Valley, marked by the sites at Dunaszekcső–Várhegy, Gerjen–Váradpuszta, Dunaföldvár–Kálvária and Sióagárd–Gencs in the Sió Valley,<sup>1182</sup> as well by a recently discovered settlement near Tolna–Mözs (229–230). In addition to various typological traits in the ceramic inventory, this groups also stands out by its settlement on tells,<sup>1183</sup> suggesting a sedentary life-style and a subsistence based on intensive cereal cultivation and animal husbandry. It must nonetheless be borne in mind that while the rudiments of this economy was undoubtedly present, the settlements of the early, proto-Nagyrév period were made up of pits both on the later tell settlements (Dunaföldvár–Kálvária, Sióagárd–

<sup>1179</sup> Strong impacts from the Somogyvár–Vinkovci culture and the proto-Nagyrév groups can be assumed farther to the north along the Danube, e.g. in the cemetery uncovered at Budapest–Békásmegyer: *Kalicz-Schreiber* (1991); *Kalicz-Schreiber-Kalicz* (1997); *idem* (1999); *idem* (2000).

<sup>1180</sup> *Kalicz* (1957); *idem* (1958); *Tóth* (1999).

<sup>1181</sup> *Horváth* (1983a); *idem* (1984a), cp. *Bóna* (1992a); *V. Szabó* (1999); *Kulcsár* (2000); *Tóth* (2003) 88–89.

<sup>1182</sup> *Szabó* (1992) 82–83.

<sup>1183</sup> *Bóna* (1992a) 14; *Szabó* (1992); *idem* (1994), cp. *Gogáltan* (2005) 161–162, Abb. 1–3.



Gencs, Gerjen–Váradpuszta and perhaps Bölcske–Vörösgyír) and on the settlements which did not evolve into tells (Tolna–Mözs).

The chronological position of this group and its place in the cultural mosaic of the Early Bronze Age are broadly indicated by the following features: the typical wares of the late Makó–Kosihy–Čaka culture cannot be found along the Danube section south of Budapest (the culture's southernmost site lies at Tököl) and only the sites north and east of the Székesfehérvár–Kánya line can be assigned to the culture. At the same time, several smaller settlements have been identified between Baja and Dunapataj on the river's opposite site (*Fig. 1, Fig. 39*). Late Vučedol finds, providing the cultural substratum of later development in southern Transdanubia, are not known north and east of the Sió Valley (which is assumed to have acted as a natural boundary). It seems likely that this diverging substratum explains the lack of the distinctive interior decorated footed bowls in the find assemblages from that region. The sites of the Somogyvár–Vinkovci culture lie south and west of the Sió Valley. Little is known about the population of the area between the Sió and Danube Rivers during the Early Bronze Age 1–2. However, it would appear that a group using different pottery wares and pursuing a different life-style can be distinguished, which is best matched by the assemblages from the Danube Valley in the Srem.

## ***Region II. Western and northern Transdanubia and Austria***<sup>1184</sup>

(Counties Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Vas, Veszprém; *Fig. 40, Fig. 42*)

The find assemblages of the Somogyvár–Vinkovci culture from north-western Transdanubia differ slightly from the material found in the culture's southern distribution, no doubt owing to the differing cultural substratum and the cultural impacts from the north and west, as well as to the influence of the Ljubljana/Laibach complex.<sup>1185</sup> The boundary of the culture's north-western distribution is marked by the tumulus burials of Illmitz, Neusiedl am See by Lake Fertő, and Gönyű and Rajka along the Danube. While independent settlements were certainly established in the Little Hungarian Plain as shown by the sites at Győrszemere–Tóth tag and Ravasz–Villibald-domb, the archaeological record suggests that west of this region, Somogyvár–Vinkovci finds were but an additional hue in the material of the Makó–Kosihy–Čaka substratum (Schwechat–Bierkeller, Sommerein, Ziersdorf). A similar phenomenon can be noted in north-eastern Transdanubia and the Slovakian river valleys, where Somogyvár–Vinkovci-like vessels appear in the burials of the Makó–Kosihy–Čaka culture, for example at Kajárpéc–Pokolfadomb, Tata–Tófarok, Lábatlan, Budapest–Aranyhegyi Road, Čaka (Graves 5 and 8) and Ivanka pri Nitre. Stray finds of the culture have been found at Esztergom and Környe, and in the material of various settlements, such as Budapest–Aranyhegyi Road and Iszkaszentgyörgy to its south (*cp. Figs 4–6*).

### *County Vas (Fig. 42)*

Regarding County Vas, Kalicz assigned two figurines from Velem and one from Sághegy to the Makó–Kosihy–Čaka culture, together with an interior decorated bowl from Szombathely–Körmendi Road (*Fig. 5*).<sup>1186</sup> Ecsedy later noted that these figurines could equally well be finds of the Somogyvár–Vinkovci culture in view of their unknown context.<sup>1187</sup> His arguments can be accepted, especially

<sup>1184</sup> Cp. also pp. 38 and 53 with a discussion of the Makó–Kosihy–Čaka distribution in the same region.

<sup>1185</sup> Cp. Kalicz-Schreiber (1989); *idem* (1991) 9; Bondár (1995) 230.

<sup>1186</sup> Kalicz (1968) 80, Fo. 52–54, Taf. X. 5, 7.

<sup>1187</sup> Ecsedy (1979a) 108.





*Fig. 42. Distribution of the Somogyvár-Vinkovci culture  
Region II: Western and northern Transdanubia and Austria*

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

1. Ajka-Erőmű, 35. Borsosgyőr-Szilfa, 37. Celldömölk-Sághegy, 38. Csabrendek-Hegyelő, 39. Csepreg-Kavicsbánya, 42. Dabronc-Rétalja-dűlő II, 43. Dabronc-Temető, 51. Dörgicse-Aszó II, 66. Gönyű-Tetűdomb (Hömbölgő), 68. Győr-Szabadhegy, 69. Győrszemere-Kutyor, 70. Győrszemere-Tóth tag, 75. Hidegség-Templom-domb, 82. Kajárpéc-Miklós major, 105. Kemenesszentpéter-Dombi-dűlő, 119. Koronóc, 127. Lovasberény, 128. Lovasberény, 136. Monostorapáti, 156. Ostffyasszonyfa, 157. (Ajka-) Padragkút, 176. Rajka-Modrovich-puszt, 177. Ravasz-Villibald domb, 188. Sé-Malomi-dűlő, 195. Somlóhegy-Séd-forrás, 216. Szombathely-Körmendi Road, 227. Tihany-Láp, 234. Vajta-Kisvajta puszt, 235. Veszprém-Nyúlterek, 255. Illmitz, 256. Neusiedl am See-Kalvarienberg



in the case of the bowl.<sup>1188</sup> While the figurines represent well-known types of the Early Bronze Age, they are rarely found on the period's sites. Bóna regarded the stray storage jar from Sághegy as a vessel of the Somogyvár–Vinkovci culture.<sup>1189</sup> In her register of the culture's sites, Bondár assigned the settlements at Csepreg and Sé to this complex.<sup>1190</sup> More recently, Ilon excavated a small settlement at Ostffyasszonyfa,<sup>1191</sup> whose pottery finds exhibit traits of both the Somogyvár–Vinkovci and the Makó–Kosihy–Čaka cultures, alongside general Early Bronze Age features.<sup>1192</sup>

Few Early Bronze Age finds are known from this region; most came to light in the county's northern half. None are known from the area south of Szombathely down to the River Zala. The material from a few small settlements and the few stray finds indicate that the communities living in the Alpine foreland maintained close ties with the late Vučedol population of Slovenia and north-western Croatia, and with the communities of the later Ljubljana/Laibach and Rudina groups, coloured with Somogyvár–Vinkovci elements.<sup>1193</sup> Contact with these groups is indicated by the jugs and interior decorated bowls decorated with incised patterns in the stab-and-drag style, as well as the figurines from Velem.<sup>1194</sup> The finds from Ostffyasszonyfa (156) too reflect cultural contacts with these regions, as shown by the jugs with an incised wolf's tooth pattern, simple interior decorated bowls and pots with a folded out rim. The pottery from the Szombathely–Körmendi Road (216) settlement includes the Somogyvár–Vinkovci culture's handled jugs and a two-handled vessel, while a handleless variant of the typical amphora was found at Celldömölk–Sághegy (37). The settlement at Csepreg (39) can be dated to the early period. It follows from the above that even though no finds which can be definitely assigned to the Makó–Kosihy–Čaka culture are known from this region, the assemblages from Sé, Szombathely–Körmendi Road, Velem (and perhaps Sághegy), Csepreg and Ostffyasszonyfa can be regarded as being contemporaneous with the Makó–Kosihy–Čaka culture.

#### *County Veszprém (Fig. 42)*

The sites north of Lake Balaton play a key role in identifying the contact region between the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures and the chronology of the two cultures relative to each other (Fig. 5). The number of find assemblages from secure contexts from County Veszprém is rather low. The area of the county was systematically surveyed as part of the Hungarian Archaeological Topography project.<sup>1195</sup> The cultural attribution of the finds collected during the survey reflect the then state of research, as well as the problems encountered in the cultural assignment of the finds owing to the many similarities in the pottery wares of the two cultures (reflected, for example,

<sup>1188</sup> Kulcsár (1999a).

<sup>1189</sup> Bóna (1965a) 42, Pl. XII. 7.

<sup>1190</sup> Bondár (1995) 251, 253, cp. Kalicz-Schreiber (1989).

<sup>1191</sup> I would here like to thank Gábor Ilon for kindly allowing me to study the finds. The finds will be evaluated and published by Zoltán Piringer in his university thesis. Cp. Piringer (2000).

<sup>1192</sup> Cp. Ilon (2004); *idem* (2006); *idem* (2007a); *idem* (2007b). Other recently identified sites of the late Vučedol/Makó/Somogyvár–Vinkovci period, whose precise cultural attribution is difficult, are Szombathely–Senyefa, Szombathely–Újperint kavicsbánya [gravel pit], Szombathely–METRO, Torony–Másfeles földék, Torony–Nemesszer-dűlő, and Bell Beaker-like sites: Bucsú–Szabaderdő, Szombathely–Zanat II: Ilon (2004) 45–47, 91, Figs 33–36, Pls XXIII–XXV; *idem* (2006) 115, Fig. 2, List 2.

<sup>1193</sup> Marković (1981).

<sup>1194</sup> Sé–Malomi-dűlő: Kalicz-Schreiber (1991) Fig. 2. 1–7, 11; Szombathely–Körmendi Road gravel pit: Mozsolics (1945) Fig. 2; Károlyi (1971–72) Fig. 3; Velem: Mozsolics (1945) Fig. 1; Kalicz (1968) Taf. X. 5, 7.

<sup>1195</sup> MRT 1–4; Ilon (1995), with a supplement to the MRT 4 volume.



by the rather inconsistent use of the labels Zók culture, Somogyvár group, and early Nagyrév in the MRT 2 volume).

In his 1965 study, Bóna assigned three sites to the Somogyvár culture: Ajka, Alsódörgicse and Somlyóvásárhely.<sup>1196</sup> The number of sites rose to five following the topographical surveys<sup>1197</sup> and today at least twelve sites are known. The cultural attribution of a few sites remains problematic owing to the frontier-like nature of the area. The form of the mugs from Tihany–Láp (227) and Padragkút (157), for example, is closer to Somogyvár wares. At the same time, sites of both cultures have been identified in the Tihany area and it is therefore possible that, similarly to other Somogyvár wares in north-eastern Transdanubia, these mugs reached the Makó–Kosihy–Čaka distribution as imports.<sup>1198</sup>

No professionally excavated burials are known from this region. It has been suggested that the large amphora from Ajka (1) had perhaps been a grave good.<sup>1199</sup> Burials of the Somogyvár–Vinkovci culture at Csabrendek (38) were suggested by finds of a handled jug, a flask and various other vessels.<sup>1200</sup> Two vessels found at Monostorapáti (136) perhaps also came from a burial.<sup>1201</sup>

Most settlements were identified through stray finds collected during field surveys (Ajka–Hőerőmű [1], Dabronc–Rétaľja-dűlő II [42], Kemenesszentpéter [105]). Disregarding the few excavations, which were mostly conducted on Makó–Kosihy–Čaka sites such as Nagydém, only two settlements of the Somogyvár–Vinkovci culture have been excavated so far: one pit at Dabronc–Temető (43) and a larger settlement section at Borsosgyőr–Szilfa (35), where Ilon uncovered the remains of timber-framed buildings, a ditch and a larger pit. The finds from the latter can be definitely assigned to the Somogyvár–Vinkovci culture, while the dating of the timber buildings is uncertain.<sup>1202</sup> A few pits were disturbed at Dörgicse–Aszó II (51) in the 1940s. Stray mugs have been reported from Padragkút, Tihany–Láp, Somlóhegy–Séd-forrás (195) and Veszprém–Nyúlkerék (235). No metal artefacts have yet been found in this region.

The Somogyvár–Vinkovci culture certainly settled in the county's westerly areas, while only sporadic traces are known to the east (Tihany–Láp, Veszprém–Nyúlkerék), alongside culturally uncertain sites yielding the culture's wares.

#### *Little Hungarian Plain (County Győr-Moson-Sopron; Fig. 42)*

Most finds of the Somogyvár–Vinkovci culture from the Little Hungarian Plain were, until quite recently, stray finds (Győr–Szabadhegy [68], Győrszemere–Kutyor [69], Koroncó [119]) or came from tumulus burials (Gönyű–Tetődomb [66], Rajka–Modrovich pusztá [176]).<sup>1203</sup> In addition to the stray finds from Kajárpéc–Miklós major (82), two settlements were investigated at Győrszemere–Tóth-tag (70) and Ravazd–Vilibald-domb (177).<sup>1204</sup> The reconstruction of the tumulus burial at Rajka, originally investigated in 1871, and the publication of its finds also added to our knowledge.<sup>1205</sup> Settlements of the Makó–Kosihy–Čaka and Somogyvár–Vinkovci culture

<sup>1196</sup> Bóna (1965a) 42, Fig. 1. 8–9, Pl. XIII. 1, Pl. XIV. 13–15.

<sup>1197</sup> Bondár (1995) 251–253; Ilon (1995).

<sup>1198</sup> For a discussion of the sites whose cultural attribution is uncertain, cp. pp. 42.

<sup>1199</sup> Bondár (1995) 251.

<sup>1200</sup> Darnay (1899) Pl. XVI, Pl. XVII. 3, 6–7; Bóna (1965a) 42, Fig. 1. 8–9.

<sup>1201</sup> Bondár (1995) 252.

<sup>1202</sup> Ilon (1995) 75–76, Site 17/9, Pl. III.

<sup>1203</sup> Bóna (1965a) 41, Pl. XII. 1–3, 11, Pl. XIII. 2–4.

<sup>1204</sup> For an overview, cp. Figler (1994); *idem* (1996a).

<sup>1205</sup> Figler (1994).



were established successively in the same region (*Fig. 5*). The finer details of this period can only be clarified after the material from the settlements is made available, which will hopefully also elucidate how Makó–Kosihy–Čaka and Somogyvár–Vinkovci pottery came to occur together in burials, as at Kajárpéc–Pokolfadomb. Until then, we can at the most only hypothesize that following the Makó–Kosihy–Čaka period coloured by late Vučedol elements, the area was settled by Somogyvár–Vinkovci groups, whose burials in strategic locations along the Moson Danube channel at Rajka and Gönyű indicate their control over this territory. Proto-Kisapostag type finds make their appearance at Győr–Fövenyesdomb and Ménfőcsanak–Szeles-dűlő at the close of the Early Bronze Age 2 and the onset of the Early Bronze Age 3,<sup>1206</sup> suggesting that the rhythm of development in the Little Hungarian Plain was more or less identical with that in southern Transdanubia.

#### *Austria (Burgenland; Fig. 42)*

Burials of the Somogyvár–Vinkovci culture have been found at Illmitz (255) and Neusiedl am See–Kalvarienberg (256) in eastern Austria.<sup>1207</sup> A number of settlement finds too provide evidence for possible contact between the Somogyvár–Vinkovci and the Makó–Kosihy–Čaka cultures (*Fig. 6*). Fragments of small handled mugs of the Somogyvár–Vinkovci culture were found at Schwechat–Bierkeller and Ziersdorf, two sites yielding assemblages with interior decorated bowls assigned to the Makó–Kosihy–Čaka culture.<sup>1208</sup> The finds from Sommerein included both Makó–Kosihy–Čaka wares and the cylindrical cups and rib decorated storage jars of the Somogyvár–Vinkovci culture.<sup>1209</sup> In the light of these assemblage and the “prestige” burials<sup>1210</sup> at Illmitz and Neusiedl am See, it yet remains to be established to what extent the Somogyvár–Vinkovci groups penetrated the area north of the Little Hungarian Plain. These finds and the burials from northern Transdanubia show strong ties between the two cultures during the Early Bronze Age 2.

#### *County Komárom-Esztergom (Fig. 42)*

The evidence from the north-easterly region of Transdanubia too indicates lively ties between the two cultural complexes. While the small handled mugs from the Esztergom area and Környe can typologically be assigned to the Somogyvár–Vinkovci culture, their cultural attribution and interpretation runs into difficulties. The stray vessels from Esztergom, Esztergom–Szentkirályi földek, Környe and Bajna–Site 47 are generally assigned to the Somogyvár–Vinkovci culture.<sup>1211</sup> Almost every burial of the Makó–Kosihy–Čaka culture in north-eastern Transdanubia contained small, coarsely made handled mugs of the type resembling the similar wares of the Somogyvár–Vinkovci culture (e.g. Tata–Tófarok, Lábatlan–Rózsa Ferenc Street). These finds can be interpreted as a reflection of the contacts between the two cultures. Their cultural attribution is difficult since the burials of the Somogyvár–Vinkovci culture are little known, and the cremation rite can essentially be linked to the Makó–Kosihy–Čaka culture. These sites are therefore not assigned to the Somogyvár–Vinkovci culture.

<sup>1206</sup> Figler (1994) 23; *idem* (1996a) 10, 17, Pl. III. 9–10, Pl. IV. 1–7. Cp. Bondár (1995) 251.

<sup>1207</sup> Cp. pp. 55.

<sup>1208</sup> Ruttkay (1982) Abb. 68; Hasenöhndl (1997) Abb. 399.

<sup>1209</sup> Ruttkay (1982) Abb. 22–23 (cylindrical cups), Abb. 44–45 (rib decorated storage jars).

<sup>1210</sup> Bóna (1992a) 14.

<sup>1211</sup> Bóna (1965a) 41, Pl. XII. 4, 8–10; Ecsedy (1979a) Abb. 6; Bondár (1995) 251–252. Cp. pp. 44.



The Early Bronze Age finds from County Fejér are rather scanty. A better knowledge of the archaeology of this region would be vital for determining the exact distribution of the partially contemporary Makó–Kosihy–Čaka and Somogyvár–Vinkovci cultures.<sup>1212</sup>

In his 1965 study, Bóna mentions a two-handled amphora “of the Somogyvár type” found at Lovasberény.<sup>1213</sup> Ecsedy regarded the available evidence as inconclusive for regarding the county’s territory as part of the Somogyvár–Vinkovci distribution.<sup>1214</sup>

Kalicz assigned the urn from Bicske and mugs from Vajta (234) to the Makó–Kosihy–Čaka culture.<sup>1215</sup> The Vajta assemblage has generally been interpreted as a mixed assemblage containing both Somogyvár–Vinkovci and early Nagyrév wares,<sup>1216</sup> reflecting the contemporaneity between the late Somogyvár–Vinkovci and the early Nagyrév period.<sup>1217</sup> The cultural attribution of the assemblage of four small vessels from Vajta, perhaps a grave assemblage,<sup>1218</sup> and four other vessels from the same area,<sup>1219</sup> raises several questions. Parallels to the two small globular, handled vessels with low, flaring neck<sup>1220</sup> can be quoted from Kánya,<sup>1221</sup> while the biconical handled mug decorated with fluting<sup>1222</sup> is matched by pieces from various Somogyvár–Vinkovci sites in southern Transdanubia.<sup>1223</sup> The elongated globular vessel with cylindrical neck and rounded shoulder compares well with jugs of the Somogyvár–Vinkovci culture.<sup>1224</sup> The rather coarse mugs too point toward the Somogyvár complex.<sup>1225</sup> The mug with elongated, curved neck and high-drawn handle<sup>1226</sup> is an unusual piece, recalling the mugs of the Baden culture, although its finish is different. Since the other small mugs of the assemblage are similarly coarsely made, it is possible that they were clumsy copies of the original jugs with elongated, curved neck. The finds from Vajta echo the traits of the Somogyvár wares from southern Transdanubia. These vessels and the pieces best matched by the ceramics from the Makó–Kosihy–Čaka/Somogyvár site at Kánya (103; *Pls* 33–35) suggest that the contact zone between the two cultures lay somewhere in this area: this section of the Sió Valley was either occupied simultaneously by Makó–Kosihy–Čaka and Somogyvár groups or they succeeded each other at the close of the Early Bronze Age 1.

\* \* \*

In sum, the presence of typical Somogyvár–Vinkovci wares can be documented in western and northern Transdanubia. Conclusive evidence for settlement is known from western Transdanubia,

<sup>1212</sup> For a more detailed description of the sites in the Székesfehérvár area, cp. pp. 41.

<sup>1213</sup> Bóna (1965a) 44; Bondár (1995) 252, too quotes this one site.

<sup>1214</sup> Ecsedy (1979a) 104–105, Abb. 6, Abb. 8–9.

<sup>1215</sup> Kalicz (1968) 79–80, Fo. 44, Fo. 59.

<sup>1216</sup> Bándi (1982) 176.

<sup>1217</sup> Ecsedy (1979a) 108, note 35.

<sup>1218</sup> Makkay (1970) 40 (42) Fig. 30.

<sup>1219</sup> Bándi (1982) Abb. 11.

<sup>1220</sup> *Ibidem* Abb. 11. 1–2.

<sup>1221</sup> Csalog (1941) Pl. VI. 3.

<sup>1222</sup> Bándi (1982) Abb. 11. 3.

<sup>1223</sup> Szava: Ecsedy (1979a) Taf. IX. 2; a variant with a more marked carination is known from Somogyvár: Bóna (1965a) Pl. X. 8.

<sup>1224</sup> Bondár (1995) Pl. 173. 339.

<sup>1225</sup> Makkay (1970) Fig. 30. 2; cp. Börzönce: Bondár (1995) Pl. 175. 371.

<sup>1226</sup> Makkay (1970) Fig. 30. 1.



the Balaton Uplands and the Little Hungarian Plain. Judging from the closed assemblages from the latter region, the arrival of the Somogyvár–Vinkovci communities can be dated to the Early Bronze Age 1, to a phase post-dating the early Makó–Kosihy–Čaka period. During the Early Bronze Age 2, we witness the strengthening of cultural impacts from southern Transdanubia toward the north. Most of the Makó–Kosihy–Čaka material from northern Transdanubia can be dated to this period, as shown by the “transitional” assemblages (predominantly recovered from burials) reflecting a blending between these two non-related complexes. Owing to the low number of finds from secure contexts, it is difficult to determine which culture played the dominant role in these assemblages.

### ***Region III. The southerly regions of the Somogyvár–Vinkovci distribution***

(Croatia, Serbia, Slovenia; Fig. 40, Fig. 43)

The other main concentration of Somogyvár–Vinkovci sites lies in the Srem and Slavonia. Interestingly enough, no sites are known from the Baranya triangle, the area lying between the two regions, although this might simply be a reflection of the lack of research. While most sites represent settlements, little can be said about their layout since most of the material is made up of stray finds and the few excavated sites are largely unpublished.

The first find assemblage from a series of closed pits uncovered at the eponymous site of Vinkovci–Tržnica (275) was published by Dimitrijević.<sup>1227</sup> After re-examining the finds from sites earlier assigned to the Vučedol culture, he added Belegiš–Gradac (281), Beograd–Rospi Ćuprija (282), and Dobanovci–Ciglana (283) to the list of the culture’s sites. He assigned a total of twenty sites in the Srem, Slavonia, western Serbia and Bosnia to the group, most of which yielded stray finds or pottery recovered from the earlier Vučedol levels. Most sites lie in the Srem and eastern Slavonia.<sup>1228</sup> Even though larger settlements have also been investigated at Batrovci–Gradina (280), Belegiš–Gradac (281), Dobanovci–Ciglana (283), Ilok–Tvrđava (260) and Vrdnik–Pécine (289), only a small selection of their finds have been published.<sup>1229</sup> The new, more recently identified sites include Pančevo–Donja Varoš (285) on the left bank of the Danube and Ostrikovac (284) in the Morava Valley.

Northern Croatia is characterised by Somogyvár–Vinkovci assemblages coloured by late Vučedol elements, labelled the Rudina type after its best known settlement at Koprivnička–Rijeka–Rudina (261).<sup>1230</sup>

The finds from Slovenia too form a separate regional group known as the Somogyvár–Vinkovci (Krog–Za Raščico [291], Ljubljana–Ig [292], Založnica [293]) and Ljubljana/Laibach cultures, which emerged at the close of the late Vučedol period.<sup>1231</sup> Moving slightly farther, we may speak of the culture’s Adriatic facies based on the finds from Odmuť Cave on the Adriatic coast.<sup>1232</sup>

No settlements have been found south of the River Sava. Graves of the Belotić–Bela Crkva group (294–303), stone packed inhumation burials and cist graves under mounds have been uncovered at Belotić, Bela Crkva and Tolišavac in the mountainous section of the Drina Valley.

Similarly to southern Transdanubia, the southern groups arriving to the Srem and Slavonia during the Early Bronze Age 1 occupied the earlier Vučedol settlements at Belegiš (281), Dobanovci

<sup>1227</sup> Dimitrijević (1966); *idem* (1982a).

<sup>1228</sup> Dimitrijević (1982a); Tasić (1984).

<sup>1229</sup> Tasić (1968); *idem* (1984).

<sup>1230</sup> Marković (2002).

<sup>1231</sup> Parzinger (1984); Velušček–Čufar (2003); Šavel (2005); *idem* (2006).

<sup>1232</sup> Marković (1974).



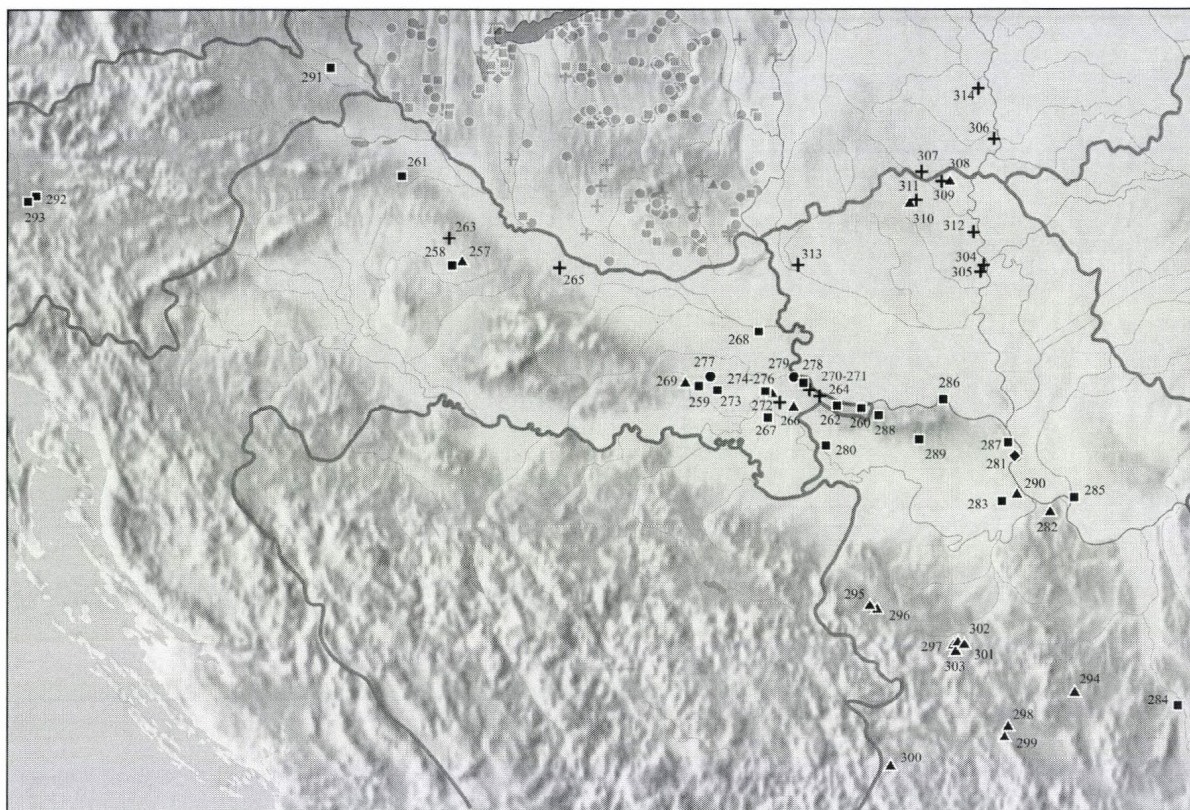


Fig. 43. Distribution of the Somogyvár–Vinkovci culture

Region III: The southerly regions

+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial

**Croatia:** 257. Drljanovac, 258. Drljanovac–Ograda I, 259. Đakovo–Grabovac, 260. Ilok–Tvrdava, 261. Koprivnička–Rijeka–Rudina, 262. Lovas–Kálvária, 263. Martinac, 264. Opatovac–formerly Königsdorfer wineyard, 265. Orešac, 266. Orolik–Gradina, 267. Privlaka, 268. Sarvaš–Gradac, 269. Selci–Đakovački–Kaznica, 270. Sotin, 271. Sotin–“Sakačevu vinogradu”, 272. Stari Jankovci, 273. Stari Mikanovci–Gradina, 274. Vinkovci–40 Duga ulica, 275. Vinkovci–Tržnica and Hotel, 276. Vinkovci, 277. Viškovci, 278. Vučedol–Gradac, 279. Vukovar

**Serbia:** 280. Batrovci–Gradina, 281. Belegiš–Gradac, 282. Beograd–Rospi Ćuprija, 283. Dobanovci–Ciglane, 284. Ostrikovac–Gradina, 285. Pančevo–Donja varoš, 286. Petrovaradin–Fortress, 287. Surduk–Marina, 288. Vizić–Golokut, 289. Vrdnik–Pećine, 290. Zemun–Šljunkara

**Slovenia:** 291. Krog–Za Raščico, 292. Ljubljana–Ig, 293. Založnica

**Belotić–Bela Crkva/Žabari–Markovica–Priboj group:** 294. Barama (Bare), 295. Bela Crkva, 296. Belotić, 297. Klinči, 298. Markovica, 299. Negrišori, 300. Priboj, 301. Robaje, 302. Zarub, 303. Žabari

**Somogyvár–Ada group:** 304. Ada, 305. Ada–Komlósi G. brick factory, 306. (Szeged)–Algyő-bank of the Tisza, 307. Ásotthalom–Borgazdaság, 308. Hajdukovo–Köröspart, 309. Hajdukovo–Székelyhalom, 310. Radanovac–Crnava Zastava, 311. Radanovac, 312. Senta–Pobeda brick factory, 313. Sombor, 314. (Baks)–Sövényháza–Kötörés

(283), Sarvaš (268), Vinkovci (275) and Vrdnik (289), and also established several new ones (Batrovci–Gradina [280]).<sup>1233</sup> Simultaneously, some of the major late Vučedol settlements, such

<sup>1233</sup> Dimitrijević (1956a); *idem* (1956b); *idem* (1966); Tasić (1968); Dimitrijević (1977–78); *idem* (1982a); *idem* (1982b); Tasić (1984); Bóna (1992a) 13–14.



as Gomolava,<sup>1234</sup> Vučedol (278)<sup>1235</sup> and Vukovar (279),<sup>1236</sup> were abandoned after the Vučedol C period (or occupation shifted to an area which has not been located yet). The network of settlements survived, although in a slightly modified form compared to the earlier late Vučedol period, both along the Danube (Belegiš–Gradac, Dobanovci–Ciglan, Ilok, Lovas–Gradac/Kálvária [262], Vukovar) and farther to the south (Batrovci, Stari Jankovci [272], Stari Mikanovci [273], Vrdnik). Similarly to the Vučedol period, neither fortified, nor other settlements of the Vinkovci culture have yet been found along the River Sava, the only notable exception being the Gomolava site.

The Vinkovci occupation at the known sites is represented by a few pits. Dimitrijević distinguished three Vinkovci horizons at the eponymous site (Vinkovci A1, A2, B), of which Horizon B, the Bebrina type, has only been observed at this settlement. Tasić noted that the pits of the Vinkovci settlement generally contained several intact vessels,<sup>1237</sup> suggesting that the pits had been used for storing foodstuffs. At Batrovci, for example, one pit contained ten more or less intact vessels.<sup>1238</sup>

The find assemblages from the settlements in the Srem have not been published in full<sup>1239</sup> and it is therefore difficult to determine the internal chronology of the settlements and their chronological position relative to each. Little is known about the relation between the late Vučedol and the earliest Somogyvár–Vinkovci groups or about the relation between the settlements which can be linked to the proto-Nagyér groups and the existing Somogyvár–Vinkovci settlements. Neither is it known whether the proto-Nagyér groups reached the line of the River Danube at the same time as the earliest Somogyvár–Vinkovci groups<sup>1240</sup> or slightly later.

The published finds suggest that in addition to the eponymous site, the earliest Somogyvár–Vinkovci groups (Vinkovci A1) first appeared at Batrovci–Gradina, Vrdnik and perhaps Ilok. The settlement at Pančevo–Donja varoš (285) on the right Danube bank can probably also be dated to this early period. The pottery from this site includes wares of both the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures. The bowls resemble the flat bowls with thickened rim and the bowls with conical shoulder of the Makó–Kosihy–Čaka culture,<sup>1241</sup> and the small knobs beside the handle of a small pot too echo Makó–Kosihy–Čaka wares.<sup>1242</sup> Another pot recalls Somogyvár–Vinkovci types,<sup>1243</sup> as does the rib decorated handle of the larger storage jars.<sup>1244</sup> The interior decorated bowl fragment is not too typical.<sup>1245</sup>

<sup>1234</sup> Petrović–Jovanović (2002).

<sup>1235</sup> A two-handled vessel (*Schmidt* [1945] Taf. 53. 4) seems to be the basis for assuming a Somogyvár–Vinkovci occupation at Vučedol: *Dimitrijević* (1982a) 32; *Bondár* (1995) 254. Although the full publication of the finds might modify this view, at the moment it would appear that the settlement was abandoned after the late Vučedol period: *Težak–Gregl* (1986); *Durman* (1988).

<sup>1236</sup> *Dimitrijević* (1982a) 32, mentions unpublished Somogyvár–Vinkovci material from these sites.

<sup>1237</sup> Batrovci, Vrdnik: *Tasić* (1984) 17–18.

<sup>1238</sup> One of which recalled the pottery of the Vattina culture. The chronological implication of the latter is uncertain: *Tasić* (1968) Pl. II. 8; *idem* (1984) 17.

<sup>1239</sup> The published material is only partially suited to typological analyses. For example, interior decorated bowls of the late Vučedol/early Somogyvár–Vinkovci transition are lacking among the published finds, while pottery wares associated with the proto-Nagyér period can be distinguished.

<sup>1240</sup> *Bóna* (1992a) 14.

<sup>1241</sup> *Grčki–Stanimirov* (1996) Pl. II. 5, Pl. III. 1–2.

<sup>1242</sup> *Ibidem* Pl. III. 4.

<sup>1243</sup> A vessel with narrow neck, rounded shoulders covered with smeared barbotine (“Schlickwurf”): *ibidem* Pl. III. 3.

<sup>1244</sup> *Ibidem* Pl. II. 5, Pl. III, Pl. IV. 1, 3–7.

<sup>1245</sup> *Ibidem* (1996) Pl. IV. 1.

The (Somogyvár-)proto-Nagyrev groups advancing northward along the right Danube bank seem to differ slightly from this early Somogyvár-Vinkovci group and from the Somogyvár culture of Transdanubia. Their sites lie beside the earlier Vučedol fortified settlements in the Srem (Belegiš-Gradac, Ilok-Gradac, Opatovac-Gradac, Petrovaradin, Sotin-Gradac, Vukovar-Gradac) and along the Hungarian Danube section (Dunaszekcső-Várhegy) up to Dunaföldvár-Kálvária.<sup>1246</sup> In addition to the settlement, a few burials were also uncovered at Belegiš (281). The grave goods from these burials date the settlement to the proto-Nagyrev period. The intensity of the site's occupation during the preceding period remains unknown since the finds are still unpublished.

Similarly to Transdanubia, very few burials are known from the Srem and Slavonia: two crouched inhumation burials from Belegiš-Gradac and inurned burials from Belegiš (281), Beograd-Rospi Čuprija (282), Drljanovac (257), Selci-Đakovački-Kaznica (269) and Vinkovci-40 Duga ulica (274), as well as crouched inhumation burials from Belegiš and Zemun-Šljunkara (290), whose cultural attribution is uncertain. Burials were also uncovered at Orolik (266), but these are still unpublished. All of these graves were solitary burials.

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<sup>1246</sup> It seems likely that the Bell Beaker vessels found as imports in the regions south of the culture's major centres in the Budapest area reached the sites at Dunaföldvár-Kálvária, Mezökomárom and Petrovaradin (*Koledin* [2008]), Ostrikovac by the middle reaches of the River Morava (*Stojić* [1996] Pl. VII. 11) along this route.



## The settlements of the Somogyvár–Vinkovci culture

Discussed in this section are a few salient features of the settlements and settlement network of the Somogyvár–Vinkovci culture (*Figs 44–45*).<sup>1247</sup> It is quite clear from the above that the archaeological record only allows a glimpse into the internal layout and organisation of the culture's settlements. A few settlements, such as Pécs–Nagyárpád, Kaposújlak–Várdomb and Dombóvár–TESCO, stand out owing to the complexity of their internal layout. Most settlements, however, yielded little aside from a few round, not particularly deep refuse pits and clay extraction pits. Settlement features with a different function were few and far between.

### *Hilltop and fortified hilltop settlements*

The chain of hilltop and fortified hilltop settlements formed the backbone of the Somogyvár–Vinkovci settlement network.<sup>1248</sup> Settlements of this type can be found both in Slavonia and the Srem, and in Transdanubia. The Somogyvár–Vinkovci population in part occupied the earlier Vučedol settlements at Döbrököz–Tűzköves, Dunaszekcső–Várhegy, Gyulaj–Banyahegy, Somogyvár–Kupavárhegy, Zók–Várhegy and, perhaps, at Pécs–Nagyárpád, and in part established new hilltop settlements at Batrovci–Gradina, Galambok, Nagygörbő–Várhegy and Oltárc–Márkihegy, which were less intensively occupied compared to the preceding Vučedol period. Continuous occupation levels resembling the ones of the Vučedol period are lacking; with the exception of the Pécs–Nagyárpád settlement, occupation is indicated by a handful of scattered pits. In Transdanubia, the Early Bronze Age date of the fortifications has only been verified by excavation at Nagygörbő. Several larger settlements are known from Slavonia and the Srem, such as Batrovci and Belegiš, where traces of fortifications were found.

The northernmost hilltop settlement of the Somogyvár–Vinkovci culture can be found at Nagygörbő–Várhegy (139–140). The site is a fortified settlement with a tripartite layout: an irregular, oval inner enclosure measuring 115 m by 85 m on the promontory is bounded by an artificial double terrace from the east. An outer enclosure and an open area adjoined the inner fort. The section through the rampart and the trial trenches opened in the inner enclosure yielded an impressive Somogyvár–Vinkovci assemblage.

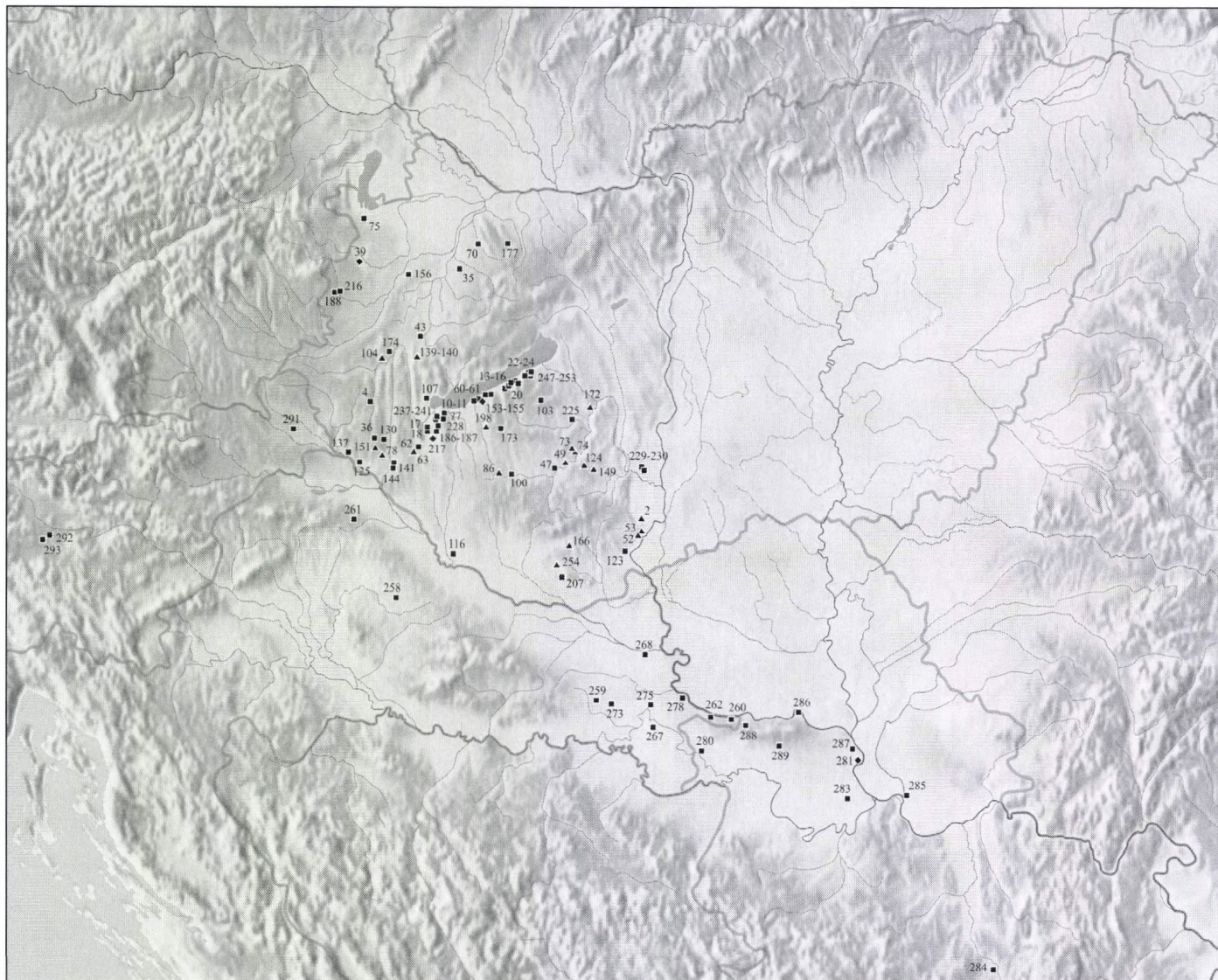
Only stray finds indicate the location of the culture's fortified settlements at Galambok–Öreghegy (63) and Oltárc–Márkihegy (151) in the Nagykanizsa area in south-western Transdanubia.

The eponymous site at Somogyvár–Kupavárhegy (198) lies on a plateau overlooking the surrounding land in the heartland of Transdanubia. While the exact construction date of the fortifications remains unknown, the sheer number of prehistoric finds nonetheless indicates that occupation had been intensive. The date of the prehistoric defenceworks (Early, Middle or Late Bronze Age) cannot be established precisely in the lack of excavation data. The settlement at nearby Kaposújlak–Várdomb (86) had been defended by ditches already during the Early Bronze Age.

<sup>1247</sup> The observations made during more recent large-scale salvage excavations (e.g. Kaposújlak–Várdomb, Dombóvár–TESCO) will offer a wealth of new information concerning settlement layout and settlement patterns, similarly as in the case of the Makó–Kosihy–Čaka culture.

<sup>1248</sup> The first studies on the Somogyvár–Vinkovci culture focused on the settlements in the culture's Transdanubian distribution. In his 1965 study, Bóna called attention to the hilltop settlements at Kemend–Várhegy, Kéthely, Lengyel, Pécs–Makárhegy, Pécs–Nagyárpád, Sághegy, Somlyóhegy and Zók: Bóna (1965a) 47.





*Fig. 44. Settlements of the Somogyvár-Vinkovci culture*

■ settlements (excavation), ◆ settlement and burial, ▲ hilltop/fortified (?) settlements in Transdanubia



Settlement types/ number and type of features	Sites	Total
hilltop/fortified (?)/ settlements	<b>2.</b> Alsónyék–Lajvér-pusztá, <b>49.</b> Döbrököz–Tüzköves, <b>52.</b> Dunaszekcső–Kálvária-hegy, <b>53.</b> Dunaszekcső–Várhegy, <b>63.</b> Galambok–Öreghegy, <b>73.</b> Gyulaj–Banyahegy, <b>74.</b> Gyulaj–Pogányvár, <b>78.</b> Homokkomárom, <b>86.</b> Kaposújlak–Várdomb, <b>104.</b> Kemendollár–Várdomb, <b>124.</b> Lengyel, <b>139–140.</b> Nagygörbő–Várodtestő, <b>149.</b> Nagyvejke–Réti szántók-dűlő, <b>151.</b> Oltárc–Márkihegy, <b>166.</b> Pécs–Nagyárpád, <b>172.</b> Pincehely–Tamási útra dűlő, <b>198.</b> Somogyvár–Kupavárhegy, <b>254.</b> Zók–Várhegy	18
number and type of features not specified/ unpublished	<b>4.</b> Bak–Rózsa Street, <b>10.</b> Balatonkeresztúr–Kiserdei-dűlő, <b>11.</b> Balatonkeresztúr–Réti földek, <b>13.</b> Balatonlelle–Kenderföld, <b>14.</b> Balatonlelle–Rádi-domb, <b>16.</b> Balatonlelle–along the Rádi Road, <b>20.</b> Balatonőszöd–Temetői-dűlő, <b>22.</b> Balatonszemes–next to Csillagpuszta, <b>60.</b> Fonyód–Bézsény-pusztá, <b>62.</b> Galambok–Hársas erdő, <b>70.</b> Györszemere–Tóth tag, <b>75.</b> Hidegség–Templom-domb, <b>100.</b> Kaposvár–Road 61, <b>137.</b> Muraszemenye–Aligvári mező, <b>143.</b> Nagykanizsa–Palin, <b>153.</b> Ordacsehi–Bugaszeg, <b>155.</b> Ordacsehi–Kis-töltés, <b>177.</b> Ravazd–Villibald domb, <b>188.</b> Sé–Malomi-dűlő, <b>217.</b> Szökedencs–Cölömpös-árok, <b>228.</b> Tikos–Homokgödrök, <b>229–230.</b> Tolna–Mőzs, <b>253.</b> Zamárdi–Bypass 65101	24
1 pit	<b>42.</b> Dabronc–Rétalja-dűlő II, <b>43.</b> Dabronc–Temető, <b>77.</b> Hollád, <b>116.</b> Komlósd–Szőlőhegy, <b>130.</b> Magyarszerdahely–Homoki-dűlő, <b>173.</b> Polány, <b>216/a.</b> Szombathely–Jáki Road, <b>239.</b> Vörs–Máriaasszony sziget, <b>240.</b> Vörs–Nyíres-sziget, <b>144.</b> Nagykanizsa–Sánc	10
1 pit-dwelling	<b>107.</b> Keszthely–Halászcserda	1
1 pit and a house (?)	<b>35.</b> Borsosgyőr–Szilfa	1
large pit-complex and open-air ovens	<b>15.</b> Balatonlelle–Rádpusztá	1
2 pits	<b>18.</b> Balatonmagyaród–Szarkavári sziget, <b>123.</b> Lánycsók–Égettmalom	2
3 pits	<b>17.</b> Balatonmagyaród–Hídvéggpusztá, <b>23.</b> Balatonszemes–Egyenes-dűlő, <b>61.</b> Fonyód–Vasúti-dűlő 2	3
6 pits and fireplace	<b>125.</b> Letenye–Szentkeresztomb	1
pits and ovens	<b>24.</b> Balatonszemes–Szemesi-berek	1
19 pits	<b>207.</b> Szava	1
20 features	<b>141.</b> Nagykanizsa–Inkey kápolna	1
30 pits	<b>36.</b> Börzönce–Temetői-dűlő	1
1 rectangular feature (house?)	<b>39.</b> Csepreg–Kavicsbánya, <b>225.</b> Tamási–Szőlőhegy	2
2 rectangular features (houses?), pits, oven	<b>103.</b> Kánya	1
house (?) and various features	<b>154.</b> Ordacsehi–Kécsimező, <b>156.</b> Ostffyasszonyfa–Kavicsbánya	2
pits, beehive shaped pits, pit complexes, fireplaces, ovens	<b>250.</b> Zamárdi–Kút völgyi-dűlő	1
ca. 20 pits and rectangular features	<b>237.</b> Vörs–Battyáni disznólegelő	1
pits, rectangular features, vessel deposit	<b>47.</b> Dombóvár–TESCO	1

Fig. 45. Settlement types of the Somogyvár–Vinkovci culture in Transdanubia



The Somogyvár–Vinkovci occupation followed a late Vučedol one at Döbrököz (49) too. The aerial photos indicate a smaller inner enclosure beside which lay an elongated outer settlement (Pl. 43. 6). Comparable hilltop settlements functioning as regional centres can be assumed at Gyulaj–Banyahegy (73), Lengyel (124) and Nagyvejke–Réti szántók (149).

Settlements with a planned layout and natural and/or artificial defenceworks have also been identified in south-eastern Transdanubia. Outstanding among these is the Pécs–Nagyárpád (166) site, where a smaller inner enclosure could be identified on the triangular plateau, with natural defences on three sides. The two hundred features uncovered on the over 10,000 m<sup>2</sup> large excavated area revealed a settlement with buildings aligned along a street. Bándi uncovered a series of large, sunken buildings with a beaten clay floor, several smaller rectangular or square buildings measuring 10–15 m<sup>2</sup> with a saddle roof supported by upright timbers, beehive shaped pits, open-air hearths and clay extraction pits. An area in the inner enclosure was flanked by two sunken buildings measuring 30–40 m<sup>2</sup>, which Bándi interpreted as “community structures”. Each yielded a rich assortment of finds.

Following the destruction of the Vučedol and late Vučedol above-ground buildings in the fortified settlement at Zók–Várhegy (254), the site was occupied by a Somogyvár–Vinkovci community. The Somogyvár–Vinkovci pottery recovered from the fill of the ditch and the area beyond the ditch suggests that the Somogyvár population had extended the occupation of the site over the entire plateau. Two pits interpreted as pit-dwellings, a rectangular ritual pit and three other pits in the plateau’s southern part yielded only Somogyvár–Vinkovci finds.<sup>1249</sup>

The Dunaszekcső–Várhegy (53) site is the currently known northernmost Vučedol settlement along the Danube. There is no conclusive evidence for Early Bronze Age defenceworks on the loess plateau overlooking the Danube. A substantial number of stray finds were collected in the area. The excavation conducted on the plateau of Várhegy Hill in 1974 yielded finds of the Baden and Kostolac periods, as well as pottery sherds of the Vučedol period and a handful of Somogyvár–Vinkovci fragments.<sup>1250</sup>

Little is known about the chain of hilltop settlements – e.g. Batrovci (280), Belegiš (281), Dobanovci (283), Ilok (260), Petrovaradin (286), Stari Jankovci (272), Vinkovci (275) and Vrdnik (289) – on the loess bluff on the right Danube bank and to its south in Slavonia and the Srem because most of these sites are still unpublished.

### *Open settlements*

In addition to these central settlements, several open settlements on smaller hillocks marked by pits (ranging from a single pit to thirty) have been identified. The settlements of the Somogyvár–Vinkovci culture are generally small, single-layer sites with pits (Fig. 45).<sup>1251</sup>

<sup>1249</sup> *Ecsedy* (1983a) 71, Pl. VIII. 2–4. A rectangular pit with straight sides and an even floor uncovered at Zók contained six storage jars set upside down. This pit was deeper than the ones at Vörs–Battyáni disznólegelő and was interpreted as a ritual pit in view of its unusual finds: *ibidem* 71, Pl. VIII. 3.

<sup>1250</sup> For the Vučedol finds, cp. *Ecsedy* (1985) Figs 8–9, Pls 8–16, Pl. 17. 4–5; for the finds of the Somogyvár–Vinkovci culture, cp. *ibidem* 95, Fig. 10, Fig. 16. 2, Pl. 17. 1–3. It has been recently suggested that the site can perhaps be interpreted as a settlement of the proto-Nagyrév culture: *Bóna* (1992a) 14–15; *Szabó* (1992) 83. A rectangular house with plastered clay floor and two pits of the Nagyrév culture were uncovered at the site. The finds from the Nagyrév occupation can be assigned to the culture’s late phase, cp. *Ecsedy* (1985) 95–96, Fig. 3, Pl. 18. 1.

<sup>1251</sup> *Ecsedy* (1979a); *idem* (1980); *Bondár* (1995) 231.



### *Small settlements (one to five pits)*

Most of the excavated settlement sections fall into this category, which is an indication not only of the brief occupation of a settlement by a mobile population during an eventful period, but also of the relatively limited options available to research. The many stray finds suggest that the settlement network was fairly dense in Transdanubia. At the same time, the relative chronology of the known settlements remains uncertain. The number of sites perceptibly declines towards the northerly areas of Transdanubia, a phenomenon which cannot be simply correlated with the extent to which a particular area has been researched.

Among the sites excavated in southern Transdanubia, the settlement at Lánycsók yielded two pits of the Somogyvár–Vinkovci culture. The “pit dwelling” uncovered at Tamási–Szőlőhegy (225) can be tentatively dated to the Somogyvár–Vinkovci culture based on the description of the finds.

Several smaller settlements have been identified along the southern and south-western shoreline of Lake Balaton, e. g. Balatonmagyaród–Hídvépuszta (17; three pits over an area of 36,000 m<sup>2</sup>), Balatonmagyaród–Szarkavári sziget (18; two pits), Komlósd–Szőlőhegy (116; one pit), Vörs–Máriaasszony sziget (239; one pit), Vörs–Nyíres-sziget (240; one pit) and Keszthely–Halászcserda (107; one pit-dwelling); cp. *Fig. 45*.

Several settlements in south-western Transdanubia are similarly marked by a handful of pits: Magyarszerdahely–Homoki-dűlő (130; one pit), Letenye–Szentkeresztomb (125; six pits) and Nagykanizsa–Sánc (144; one pit).

In spite of the many large-scale excavations conducted over extensive areas in the Little Hungarian Plain, the picture that emerges is one of small, dispersed settlements. Two smaller settlement sections have been investigated at Győrszemere–Tóth tag (70) and Ravasz–Villibald domb (177).

### *Larger settlements (six to thirty pits)*

The currently known larger, excavated settlements are concentrated in southern Transdanubia (*Fig. 45*).

A 6000 m<sup>2</sup> large area was investigated on the island-like elevation near Nagykanizsa–Inkey kápolna (141). Altogether twenty pits were excavated, among them two dwelling pits and two storage pits.<sup>1252</sup> Most of the features lay in the settlement’s north-western part; only two features were identified in the southern part.

Bondár excavated 890 m<sup>2</sup> of an 8–10,000 m<sup>2</sup> large settlement at bounded by marshland and a small stream at Börzönce–Temetői-dűlő (36). Ten of the thirty Early Bronze Age pits barely contained any finds. Two main type of pits were observed: pits with straight sides and even floor, and beehive shaped pits. One pit (Pit G) was a larger rectangular pit measuring 3.1 m by 3.2 m.<sup>1253</sup> It became clear that the pits mostly lay along the two banks of this former watercourse flowing north-east to south-west. Bondár suggested that the residential buildings were either flimsy structures with a short life-span or they lay on the uninvestigated, western part of the hill.

<sup>1252</sup> Horváth (1983b) 12, *Fig. 4*. This dwelling pit (Pit 19) was originally dug to a depth of 240 cm, but was later filled up to make it only 125–130 cm deep. The earth (floor?) was strongly burnt at this level and was covered with burnt daub fragments. Two pits (Pits 12 and 92) had functioned as storage pits; one had rounded sides lined with some sort of organic material, perhaps wickerwork.

<sup>1253</sup> Bondár (1995) 200.

Nineteen Early Bronze Age pits were uncovered on the 600 m<sup>2</sup> large area excavated at Szava (207). Most were simple refuse pits, sometimes with traces of firing. The estimated size of the settlement was some 10–15,000 m<sup>2</sup>.

Smaller sections featuring pits and smaller buildings or workshops of what were probably larger settlements have been investigated at Ordacsehi–Kécsimező (154; a few pits and a perhaps house) and at Vörs–Battyáni disznólegelő (237; a few pits and small square buildings with plastered floor measuring 2 m<sup>2</sup> to 4 m<sup>2</sup>). A 7 m by 7.5 m large section of a sunken oblong feature interpreted as a house was excavated at Csepreg (39) in western Transdanubia. Small sections of extensive settlements have been uncovered at Ostffyasszonyfa (156), Sé (188) and Szombathely–Jáki Road (216).

Recently investigated Slovenian sites such as the one at Založnica (293) and Krog–Za Raščico (291) indicate a layout resembling the one at Börzönce. Only selections of the finds brought to light on settlement excavations in the culture's eastern Croatian and Serbian distribution have been published, the only exception being the Vinkovci site. Virtually nothing is known about the internal layout of these settlements.<sup>1254</sup>

### *Subsistence*

Additional information on subsistence and lifeways can be expected from palaeoenvironmental and archaeozoological analyses. For the time being, only the evidence from the animal bone samples is available, according to which cattle, pig, and sheep were the most frequent domesticates.<sup>1255</sup> As regards wild species, red deer, roe-deer, wild boar, hare and fish remains were found at Szava, and roe-deer and dog bones were identified in the animal bone sample from Börzönce. Few animal bones were found at the latter site; however, spindle whorls used for spinning wool and the small animal figurines from the site provide indirect evidence for pig, cattle and sheep breeding.<sup>1256</sup>

The dispersed layout of the currently known settlements suggests a population of mobile communities, even if this is slightly contradicted by the existence of a few hilltop settlements. The archaeological record suggests a less concentrated and less well organised society compared to the preceding Vučedol period, and a settlement network conforming to the general pattern of the Early Bronze Age in the Carpathian Basin.

<sup>1254</sup> Tasić (1968); *idem* (1984) 23; *idem* (1995a), *idem* (1995b).

<sup>1255</sup> Szava: Vörös (1979); Börzönce: Bartosiewicz (1995) Table 2; Ravasz–Villibald-domb and Györszemere–Tóth tag: Bartosiewicz (1996).

<sup>1256</sup> Bondár (1995) 216.



## The burials of the Somogyvár–Vinkovci culture

Very little has been added to our knowledge of the Somogyvár–Vinkovci culture's burial customs since Bóna's study in the early 1960s.<sup>1257</sup> Bóna noted several divergences between the two regional Somogyvár groups. Very often, the burial did not lie under the mound, but was dug into it (Neusiedl am See, Negrišori); in some cases, the deceased was laid in a cist grave (Klinici, Markovica), above which there was a stone packing (Neusiedl am See, Negrišori, Žabari). An offering of food and vessels was sometimes deposited over the burial or dug into the mound at some later time. The deceased were generally laid to rest in an extended position on their back and oriented west to east. A few crouched inhumation burials are also known.<sup>1258</sup>

Similarly to other regions during this period, very few burials are known,<sup>1259</sup> and the number of grave assemblages with secure contexts is low. The graves from Transdanubia, Slavonia and the Srem show a colourful diversity, ranging from cist graves and stone packed burials to crouched inhumation graves under a tumulus. The custom of funeral offerings deposited after the burial has been observed, both as deposits in the tumuli and as a practice independent of the latter ("symbolic burials"). A handful of crouched inhumation burials did not have a tumulus raised over the grave (although it must in all fairness be admitted that these graves were poorly documented). Finally, there is also evidence for cremation burials in all three regions, which are generally interpreted as symbolic burials.

The currently known burials and possible grave assemblages of the Somogyvár–Vinkovci culture form a colourful mosaic (Figs 46–47). Unfortunately, very little can be said about general traits owing to the stray nature of most finds, and even less about the relative chronology of the burials.

### *Tumulus burials*

It would appear that tumulus burials represent a well-definable regional variant, at least judging from the regional concentrations of these burials. Tumulus burials occur in the frontier zones of the more or less similar, and probably related, Early Bronze Age cultural/ethnic/techno-complexes and along major routes. Concentrations of tumulus burials have been found in the Lake Fertő area and at the confluence of the Danube and the Moson Danube channel (e.g. Neusiedl am See, Rajka, Gönyű), in the area of the copper deposits in central Transylvania (Livezile–Ampoița group),<sup>1260</sup> and in the Lower Danube region (Verbița).<sup>1261</sup> The tumulus burials in Montenegro (Mala Gruda, Velika Gruda) can also be assigned here.<sup>1262</sup>

<sup>1257</sup> Bóna (1965a) 47; Bándi (1984a) 127; Tasić (1984) 24–25.

<sup>1258</sup> Bóna (1965a) 47.

<sup>1259</sup> Kalicz-Schreiber (1991); Ciugudean (1996); Primas (1996); Dani (1997a); *idem* (1998); Kalicz (1998b); Kalicz-Schreiber–Kalicz (1999) 86–88.

<sup>1260</sup> Ciugudean (1996) 78–96.

<sup>1261</sup> The inhumation burials near Verbița, lying in the westernmost area of the Glina III–Schneckenberg distribution, share many similarities with the Somogyvár–Vinkovci/Belotić–Bela Crkva complex. The reports mention five tumuli, two of which have been excavated to date: *Berciu* (1961) Fig. 17. 1, 2; *Berciu–Roman* (1984); *Machnik* (1985) 30, Abb. 1. The grave goods of the inhumation burials under the mound each included a jug with cylindrical neck (*Berciu–Roman* [1984] Fig. 2. 1, 3–4), a type undoubtedly related to the wares of the Belotić–Bela Crkva group from Priboj (Bóna [1965a] Pl. XVII. 16) and of the Somogyvár–Vinkovci group from Sármedék and Pókaszepetk (*ibidem* Pl. XIV. 7, 10).

<sup>1262</sup> Govedarica dated the tumulus burials in Montenegro (including the one at Velika Gruda) to the proto-Cetina phase of the post-Vučedol period (*Govedarica* [1989a] 116 ff), which corresponds to the Early Bronze Age 2b period in Hungary. However, the radiocarbon dates for the burial indicate a date in the first half of the



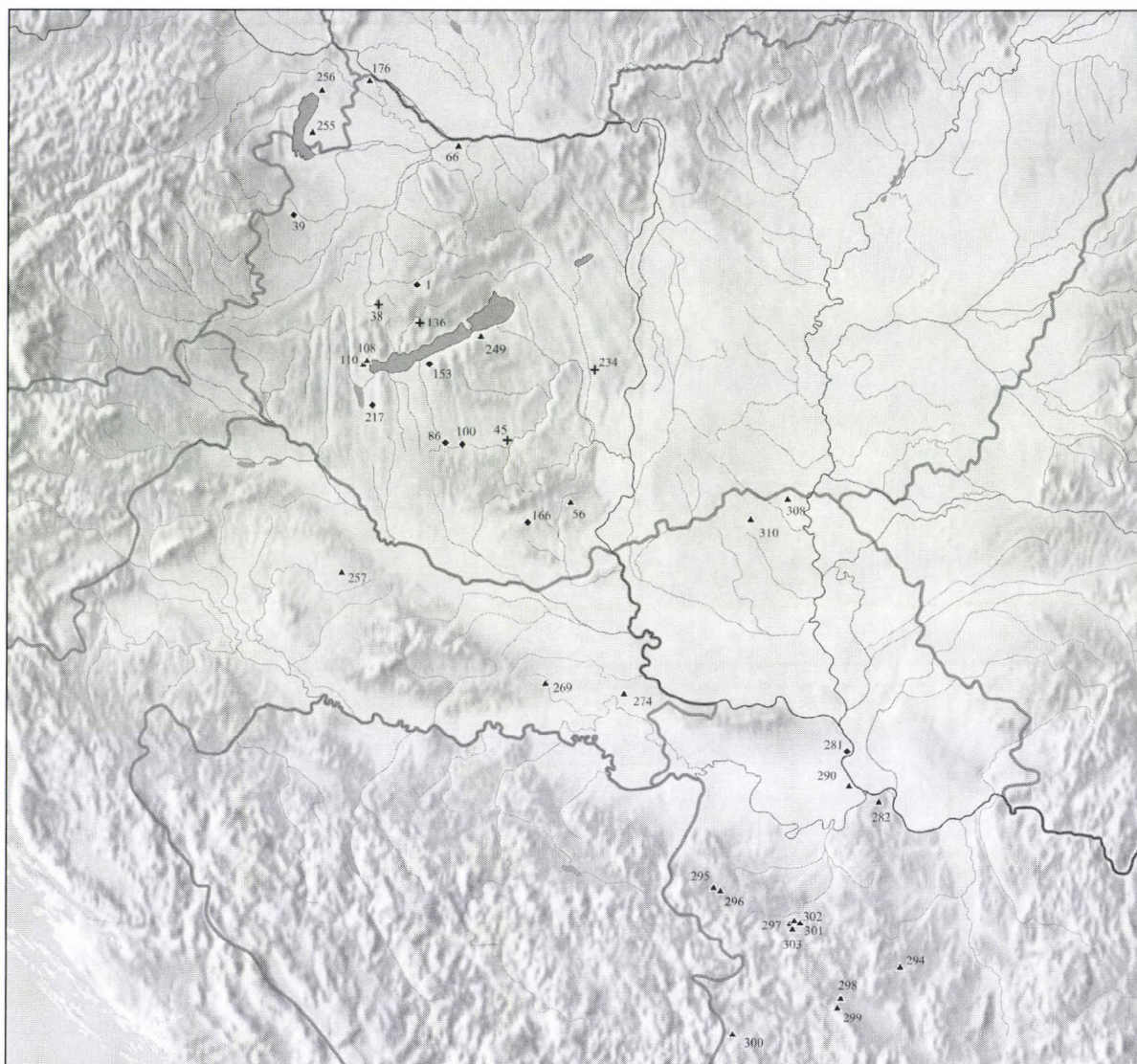


Fig. 46. Burials of the Somogyvár–Vinkovci culture  
 ▲ burial, ◆ settlement and burial, + burial (?)

The early burials outlining the route taken by the immigrant groups in the mountainous section of the Drina Valley can be identified with the stone packed cist graves containing inhumation burials of the Belotić–Bela Crkva group,<sup>1263</sup> although a few scattered cremation burials are also known (e.g. Belotić, Tumulus 11 and 12; 294–303). A stone packing was noted above some inhumation burials (Belotić, Tumulus 10, Grave 4; Bela Crkva, Tumulus 2 and 4). Other burials were placed in cists (Markovica–Negrišori), or on a layer of pebbles (Bela Crkva, Tumulus 2 and 4; Tolišavac). It seems likely that funerary vessel offerings were sometimes also deposited.<sup>1264</sup> The number of grave goods from these burials is rather low: jugs and the occasional bowl.

3rd millennium BC for the primary burial at Velika Gruda, corresponding to the Adriatic Laibach group of the Vučedol period (Vučedol B2–C and EH II; *Primas* [1996]; *Maran* [1998] 322, note 243).

<sup>1263</sup> Belotić, Bela Crkva, Tolišavac: *Garašanin* (1958).

<sup>1264</sup> E.g. at Bela Crkva (Tumulus 1 and 2) and at Markovica–Negrišori, where vessels were found beside the central burial and dug into the top of the mound: *ibidem* notes 493–494.



Sites	Number and rite of burials
<b>Hungary</b>	
1. Ajka–Erőmű	?
38. Csabrendek–Hegyelő	?
39. Csepreg–Kavicsbánya (?)	inhumation
45. Dombóvár–Fehérhidi-dűlő	?
56. Erzsébet–TSZ major (?)	inhumation
66. Gönyű–Tetődomb	tumulus/inhumation grave
86. Kaposújlak–Várdomb	3 inhumation
100. Kaposvár–Road 61 (?)	2 inhumation
108. Keszthely–Lehenrét	cremation
110. Keszthely–18. sz. vasúti őrház	cremation (?)
136. Monostorapáti	?
153. Ordacsehi–Bugaszeg	2 inhumation
166. Pécs–Nagyárpád	inhumation (?)
176. Rajka–Modrovich-pusztá	tumulus/cremation ?
217. Szőkedencs–Cölömpös-árok	53 cremation
234. Vajta–Kisvajta pusztá	cremation (?)
249. Zamárdi–46 Fő Street	scattered cremation (?)
<b>Austria</b>	
255. Illmitz	?
256. Neusiedl am See–Kalvarienberg	tumulus/inhumation
<b>Croatia</b>	
257. Drljanovac	inurned
266. Orolik–Gradina	?
269. Selci–Đakovački–Kaznica	inurned
274. Vinkovci–40 Duga ulica	inurned
<b>Serbia</b>	
281. Belegiš–Gradac	2 inhumation, 2 cremation (?)
282. Beograd–Rospi Čuprija	inurned
290. Zemun–Šljunkara	inhumation
<b>Belotić–Bela Crkva group</b>	
294. Barama (Bare) (Tumulus II)	tumulus
295. Bela Crkva	tumulus
296. Belotić	tumulus
297. Klinci	tumulus
298. Markovica	tumulus
299. Negrišori	tumulus
300. Priboj	tumulus
301. Robaje	tumulus
302. Zarub	tumulus
303. Žabari	tumulus
<b>Somogyvár–Ada group</b>	
308. Hajdukovo–Köröspart	cremation
310. Radanovac–Crnava Zastava	inhumation

Fig. 47. Burials of the Somogyvár–Vinkovci culture

The Žabari/Markovica–Negrišori/Priboj tumuli represent a separate chronological group among the Serbian tumulus burials.<sup>1265</sup> They can be traced from the Drina Valley to the Valjevo area (Žabari, Klinici, Robaje), to the western Morava region in the Čačak area (Markovica, Negrišori) and to Priboj near Lim. The latter are generally interpreted as the “rear guard” of the Somogyvár–Vinkovci culture, whose nature and function can be compared to the “vanguard” in the Moson Danube area.<sup>1266</sup> In view of their type and the grave pottery, the tumulus burials of the Belotić–Bela Crkva group can also be assigned here, even though they obviously form a separate regional and chronological group. The Belotić–Bela Crkva group was obviously related to the Somogyvár–Vinkovci culture.<sup>1267</sup> Dimitrijević interpreted it as the culture’s western Serbian/eastern Bosnian facies,<sup>1268</sup> while Tasić regards the group as a local variant of the Vinkovci culture.<sup>1269</sup>

One of the tumulus graves in the northern frontier region is the burial uncovered in 1871 at Rajka–Modrovich puszta (176),<sup>1270</sup> which could be reconstructed from the 19th century descriptions.<sup>1271</sup> Eight vessels and a whetstone, lying at different depths, were brought to light from the 2.6 m high burial mound with a diameter of 66 m. The burial rite of the grave underneath the mound remains unknown, and it has also been suggested that some of the finds were probably not grave goods, but the remains of later funerary offerings. It seems likely that the mound had been raised over a cremation grave.

The tumulus at Gönyű–Tetűdomb (66) had probably been erected over an inhumation burial, which had contained two vessels. The stone-packed burial mound at Neusiedl am See–Kalvarienberg (256) on the northern shore of Lake Fertő contained the west to east oriented inhumation burial of a man laid to rest extended on his back. A pair of golden lockrings lay beside the skull by the ears, and an amphora and two jugs with strap handles had also been placed into the grave. Judging from an assemblage made up of an amphora and two bowls, a similar inhumation burial can probably be assumed at Illmitz (255).

The grave goods placed beside the primary burials under the tumulus are generally restricted to one to three vessels (jug, vessel with asymmetrical handles, amphora) and the occasional metal article (golden lockring). The custom of funerary offerings deposited sometime after the burial has been observed at Gönyű, Neusiedl am See, Robaje and Negrišori.<sup>1272</sup> The recently re-published documentation of the Neusiedl am See tumulus suggests that the finds had been placed into the graves simultaneously with the burial as grave goods.<sup>1273</sup> Since the burial rite of the primary burial at Rajka is not known, it is uncertain which of the pottery finds had been placed into the grave. The surviving description of the tumulus burial records that the vessels had been discovered at different

<sup>1265</sup> These tumuli have been assigned to the Somogyvár–Vinkovci complex: *Bóna* (1965a) 45; *idem* (1992a) 14; *Bondár* (1995) 251–254.

<sup>1266</sup> *Bóna* (1992a) 14.

<sup>1267</sup> *Ecsedy* (1979a) 113; *Maran* (1998) 322. The question remains to what extent these tumulus burials can be regarded as part of the Somogyvár–Vinkovci complex or, conversely, as a separate cultural unit. It seems to me that since only the burials of this group are currently known, a functional (burial) rather than cultural difference seems more likely. At the same time, the independence and southern origins of the group are indicated by the fact that interior decorated bowls of the post-Vučedol period have not been recovered from these burials. In her discussion of the Priboj tumulus, Kalicz-Schreiber noted the uncertainties in its cultural attribution: *Kalicz-Schreiber* (1991) 12.

<sup>1268</sup> *Dimitrijević* (1982a) 22.

<sup>1269</sup> *Tasić* (1984) 19.

<sup>1270</sup> A stray vessel was earlier found at this site: *Patay* (1938) Pl. IX. 1; *Bóna* (1965a) 41, Pl. XII. 11.

<sup>1271</sup> *Figler* (1994) 22, Abb. 9.

<sup>1272</sup> *Bóna* (1965a) 47; *idem* (1972) 6.

<sup>1273</sup> *Hahnel* (1992) 86–87, Taf. 6. 4; *Ruttkay* (2002); *idem* (2003).



depths; the finds are dominated by small mugs and handled jugs, which can also be associated with a libation offering made after the burial. A similar interpretation can perhaps be assumed for the handled jugs from Gönyű.

### *Inhumation burials*

In addition to the tumulus graves, evidence for a possible crouched inhumation burial comes from Erzsébet (56), described as having had a handled jug as a grave good.<sup>1274</sup> Another, similarly uncertain burial has been reported from Pécs–Nagyárpád.<sup>1275</sup>

A few inhumation burials from Slavonia and the Srem are assigned to the Somogyvár–Vinkovci culture. Two inhumation burials were found at the fortified settlement of Belegiš (281), one of which contained a two-handled vessel and a jug by the feet.<sup>1276</sup> The two-handled vessel is clearly alien to the Somogyvár–Vinkovci pottery; its nearest parallel can be found among the proto-Vattina finds from Pančevo on the opposite bank of the Danube<sup>1277</sup> and among the grave pottery of the Óbéba–Pitvaros group.<sup>1278</sup> At the same time, pieces resembling the jug do not occur either among proto-Vattina or Óbéba–Pitvaros wares; matching jugs can be found among the similar Vinkovci jugs, especially in the settlement pottery of the sites linked to the proto-Nagyrév migration in the Srem,<sup>1279</sup> and the finds from Kötörés.<sup>1280</sup> This burial can most likely be assigned to a later phase in the Vinkovci sequence, in which proto-Nagyrév finds make their appearance.

The burial uncovered at Zemun–Šljunkara (290) on the right bank of the Danube stands out from among the Early Bronze Age graves. The grave contained the burial of a young woman laid to rest in a contracted position. She wore a gold diadem on her head and eight vessels were placed by her head and feet.<sup>1281</sup> No traces of a burial mound were observed above the grave. The grave pottery was dominated by two-handled jugs.<sup>1282</sup> The mugs from the burial have their best counterparts among the pottery finds from the Pitvaros cemetery<sup>1283</sup> and the grave pottery from Belegiš.<sup>1284</sup> The best formal parallel to the larger vessel also comes from the latter site (although represented by a one-handled variant).<sup>1285</sup> The best analogies to the burial rite and the grave goods can be quoted from the Óbéba–Pitvaros and Periam/Perjámos cultures.<sup>1286</sup> The burial from Zemun and the two probably co-eval graves from Belegiš, lying more to the north, can probably be associated with one of the early population groups slowly infiltrating the region from the south.

<sup>1274</sup> Bóna (1965a) 43, based on information from Attila Kiss. The same site is described as a settlement by Bándi, quoting field survey data: Bándi (1979) 70, cp. also Bondár (1995) 251.

<sup>1275</sup> Bándi (1968a) 74, note 22. Inhumation burials, without any gravegoods have been also reported from the settlements at Kaposújlak–Várdomb (86), Kaposvár–Road 61 (100) and Ordacsehi–Bugaszeg (153).

<sup>1276</sup> Tasić (1968) 23, Taf. III. Abb. 12–13.

<sup>1277</sup> Grčki–Stanimirov (1992) T. I. 3.

<sup>1278</sup> Bóna (1963) Pl. III. 7.

<sup>1279</sup> Batrovci: Tasić (1984) Taf. IV. 8; Ilok: *ibidem* Taf. I. 4.

<sup>1280</sup> Bóna (1963) Pl. XII. 2, 6.

<sup>1281</sup> Vranić (1991).

<sup>1282</sup> *Ibidem* T. III. 2–3.

<sup>1283</sup> Pitvaros: Bóna (1965a) Pl. II. 12.

<sup>1284</sup> Tasić (1968) Taf. III. 12.

<sup>1285</sup> Belegiš–Gradac: *ibidem* Taf. III. 13.

<sup>1286</sup> The diadem is matched by a similar piece from Grave 73 of the Mokrin cemetery: Girić (1971) Pl. XXII.



Inhumation gained a wider currency in the southern part of the Danube–Tisza Interfluvium, in the Somogyvár–Ada group,<sup>1287</sup> and in the cave burials of the Roşia group in the Rapid Körös region.<sup>1288</sup> With the exception of the contracted inhumation burials found under a tumulus, this rite does not seem to have been particularly popular in the Transdanubian and Slavonian distribution of the Somogyvár–Vinkovci culture. It would appear that this rite can be linked to the influence or actual presence of groups migrating northward along the Drina, the Danube and the Tisza.

### *Cremation burials*

There is little evidence for cremation burials.<sup>1289</sup> Two such burials are known from Fenékpusztá near Keszthely (110), where an assemblage of four intact vessels suggested a cremation or symbolic burial. At Keszthely–Lehenrét (108), the burnt bones and ashes were placed in a large bowl together with a handled jug and a bronze pin. The two scattered cremation burials from Kajárpéc–Pokolfadomb (MKČ cat. no. 137) can be assigned to the late Makó–Kosihy–Čaka period, in which the small cups and mugs, which later become a hallmark of the Somogyvár–Vinkovci, make their appearance. The context and the cultural attribution of the four vessels from Vajta (234), allegedly the grave goods of a cremation burial, are uncertain.

One cremation burial is known from the (Somogyvár–)Ada distribution: a grave yielding a vessel with asymmetrical handles was found at Hajdukovo (308).<sup>1290</sup>

Inurned cremation burials have been found at Belegiš (281), Beograd–Rospi Čuprija (282), Drljanovac (257), Selci–Đakovački–Kaznica (269) and Vinkovci–40 Duga ulica (274) in the culture's Slavonian and Sarmatian distribution.

The inurned burial from Drljanovac near Bjelovar, assigned to the Vinkovci A2 period, came to light during earthmoving operations.<sup>1291</sup> The finders reported two urns containing ashes, beside which lay a bowl and two smaller brushed pots.

Another inurned burial is known from Beograd–Rospi Čuprija. Deposited in the grave were an urn and three bowls. One of the bowls was placed in the urn, which was then covered with another bowl. The burial was initially assigned to the Hallstatt period.<sup>1292</sup> This dating was revised by Tasić, who assigned the burial to the Nagyrév period, whereby the grave marked the culture's southernmost site.<sup>1293</sup> Tasić later modified his own dating and assigned the grave to the Vinkovci culture, quoting the vessels from Vrđnik as parallels to the urn and the urn lid from Belegiš as an analogous find to the lid. He dated the grave to the late Vinkovci period on the basis of the conical bowl with incised linear decoration.<sup>1294</sup> Hungarian research does not consider this burial to represent a site of the Somogyvár–Vinkovci culture.<sup>1295</sup>

<sup>1287</sup> Horváth (1984a) 26. Cp. Kulcsár (2000); Bende–Lőrinczy (2002).

<sup>1288</sup> Emődi (1985); Emődi–Halasi (1985).

<sup>1289</sup> Fifty-three Somogyvár–Vinkovci burials have been excavated at Szökedencs (217) on the eastern fringes of the Little Balaton region. Most of the still unpublished burials were poorly preserved. Another grave, possibly a cremation burial, has been reported from Zamárdi–46 Fő Street (249).

<sup>1290</sup> Horváth (1984a) 13, Pl. III. 1, Pl. IV. 1.

<sup>1291</sup> Majnarić–Pandžić (1981). The Drljanovac–Srednje polje site lies by Nova Rača near Bjelovar; the findspot sometimes appears as Koprivniča: Dimitrijević (1966) 28; Tasić (1968) 20; *idem* (1984) 5.

<sup>1292</sup> Todorović (1956) 40–41, 61, Figs 15–18.

<sup>1293</sup> Although he did quote the urns from the Somogyvár–Vinkovci sites at Ajka and Gönyű as parallels to the grave pottery: Tasić (1975) 151–152.

<sup>1294</sup> Tasić (1984) 25.

<sup>1295</sup> Ecsedy (1979a); Bondár (1995) 250–252.



The grave goods of the two urn burials from Belegiš perished when the loess bank collapsed and are known only from descriptions,<sup>1296</sup> according to which one of the burials contained an ovoid amphora with cylindrical neck and the other “a pithos-like, wide-mouthed vessel”. A bowl and “a vessel resembling the handled jugs from Kötörés” had probably also been part of the grave pottery.

### *Funerary offerings*

Noting the strikingly high number of assemblages made up of intact vessels from the Transdanubian distribution of the Somogyvár–Vinkovci culture, Bóna suggested that they had been grave goods from burials or the remains of funerary offerings made after the burial.<sup>1297</sup> Many of the culture’s initially known finds were indeed made up of intact vessels and the number of such assemblages has since increased, for example by the mugs, bowls and interior decorated pedestalled bowls regularly found at Nagyvejke (149; *Pls* 47–48).<sup>1298</sup> Köhegyi found a similar assemblage of near-intact vessels on the outskirts of Dombóvár (44); the three interior decorated bowls (*Pl.* 42) can perhaps be interpreted as the one-time grave goods of a symbolic or cremation burial in view of their intact condition.<sup>1299</sup> Even though groups of intact or near-intact vessels have occasionally been recovered from settlement pits, the possibility cannot be excluded that some of the stray assemblages had been the grave goods of a symbolic burial. The pottery from the Nagyvejke site can be interpreted as a vessel deposit from a settlement, as can similar assemblages from Börzönce (36) and Dombóvár–TESCO (47) and several settlement sites in the Srem and Slavonia. Tasić interpreted these vessel assemblages as reflecting a concentration of food storage.<sup>1300</sup>

Various other stray finds of intact vessels from Transdanubia are generally regarded as the grave goods from destroyed burials, e.g. in the case of the pieces from Ajka, Győr–Szabadhegy, Keszthely–Fenépuszta, Környe, Lengyel, Rajka, Sármellék and Simongát.<sup>1301</sup> The vessels from Csabrendek and Monostorapáti are also tentatively assigned to this category.<sup>1302</sup>

<sup>1296</sup> *Trbuhović* (1956) Fig. 6; *Tasić* (1968) 23; *idem* (1974) 193, Figs 123–126; *idem* (1976) 152–153; *idem* (1983) 48; *idem* (1984) 24–25. Several burials are known from the Belegiš site. What seems certain is that one inhumation burial with grave goods, another inhumation burial without any grave goods and an assemblage of five vessels had been found at the Belegiš site, alongside four other vessels and various pottery fragments.

<sup>1297</sup> For the Nagyvejke vessel assemblage, cp. *Bóna* (1972) 6. In the lack of ashes or other remains suggesting a burial, the stray vessel finds from the Makó–Kosihy–Čaka distribution too are generally regarded as the grave goods of symbolic graves. Even assuming that the find circumstances were poorly recorded (or not at all), an interpretation as a funerary offering made some time after the burial can also be considered in the case of these finds (cp. pp. 85).

<sup>1298</sup> No control excavation has been conducted on this site, which is continuously monitored by Antal Csiszér, a private collector, according to whom there were no traces of ashes, bones or vessel clusters indicating burials.

<sup>1299</sup> According to Attila Gaál, burials had been found in an area known as Dombóvár–Fehérhidi-dűlő (45), also on the outskirts of Dombóvár. Nothing is known about the grave goods of these burials.

<sup>1300</sup> One such assemblage was found at Vrdnik: *Tasić* (1984) 17–18; *Popović* (1997).

<sup>1301</sup> *Bóna* (1972) 6.

<sup>1302</sup> *Bondár* (1995) 251–252.

## Pottery and other artefacts of the Somogyvár–Vinkovci culture in Transdanubia

### Pottery

The general features of Somogyvár–Vinkovci pottery, evident in the ceramic inventory of all regional groups, are the following:

#### Fabric

In addition to sand and quartz, the clay used for pottery was generally tempered with finely and, occasionally, coarsely crushed pebbles.<sup>1303</sup>

#### Surface treatment

The vessel surface was left matte, both in the case of fine and coarse pottery. The body of the fine wares, such as jugs and mugs, was rarely polished. Polishing was only applied to the interior decorated bowls of the culture's early period and towards the end of Somogyvár–Vinkovci sequence, on the sites pointing towards the proto-Nagyrev period (e.g. the flask from Gerjen). In the case of coarse pottery, such as pots and bowls, the vessel neck was smoothed or, very rarely, polished down to the shoulder, while the lower part was coarsened with brushing or scoring, or carelessly smoothed with an additional layer of clay applied to surface ("Schlickwurf"). Bowls were sometimes decorated with combing.

#### Colour

Vessels were usually fired to various shades of grey, black and brown or an ochre or reddish-brown colour.

A statistical evaluation of the pottery finds was not possible owing to the stray nature of many assemblages and the host of still unpublished finds from major excavations, making any statistics grossly misleading. Similarly, a description of possible size variations of a particular vessel type is sometimes also lacking since vessel sizes are not always specified in the published reports. In many cases, the identification of a particular variant was based on a single find which, similarly to the typology presented for the Makó–Kosihy–Čaka culture, perhaps resulted in an over-classification. However, it is my hope that the classification presented here will serve as a basis for further pottery analyses.

The typological analysis is based on the ceramic inventory of the finds from Börzönce and Szava, the culture's two most important settlements in Transdanubia.<sup>1304</sup>

### *I–II. Jugs and mugs (Figs 48–52)*

A distinction is generally drawn between the one-handled vessels used as liquid containers and for drinking: larger pieces are generally categorised as jugs, while smaller ones as mugs. In her evaluation

<sup>1303</sup> Cp. Kreiter (2007).

<sup>1304</sup> Bóna had initially distinguished nine basic vessel types: Bóna (1965a) 47–49. For Szava, cp. Ecsedy (1979a) 101–102, Abb. 5; for Börzönce cp. Bondár (1995) 200–220, Figs 12–18. In his discussion of the finds from the Srem and Slavonia, Dimitrijević took the ceramic inventory from Vinkovci as his starting point, cp. Dimitrijević (1982a). A comprehensive overview of the finds from these regions are still lacking.



of the pottery finds from Börzönce, Bondár divided the vessels earlier lumped together as jugs into two different categories: large jugs, with a height of 17.2–19.3 cm and smaller juglets with a height of 12–13.8 cm.<sup>1305</sup> However, the typological system created for the ceramic inventory from Börzönce cannot be consistently applied to all the pottery finds from the culture's distribution and thus the following distinction shall be applied here: vessels with a height of 3–12 cm will be described as mugs, while vessels with a height of 12–20 cm as jugs.

Several variants can be distinguished among both jugs and mugs. Most of these are regional, although chronological differences can also be assumed in the case of a few variants. However, neither vessel type is suitable for chronological fine-tuning.

Jugs and mugs can be assigned to the carefully made fine wares. They generally have a matte or lightly polished surface. The decorated jugs from Börzönce include a fragment bearing a bundle of incised zig-zag lines flanked by encrusted punctates.<sup>1306</sup> Channelling seems to have been more popular in south-eastern Transdanubia and Slavonia,<sup>1307</sup> although vessels with channelled decoration have been found on the Somogyvár–Kupavárhegy settlement too. A simpler variant of channelling translated into incised lines occurs on some pieces.

### *I. Mugs (Figs 48–49)*

Mugs make up one of the perhaps most distinctive ceramic categories in the pottery from Transdanubia. Most mugs are rather simple wares. Decorated variants appear to have been more common in south-eastern Transdanubia, although simple incised motifs occur across the culture's entire distribution (e.g. Esztergom–Szentkirályi földek: *Fig. 49. I/12a*).<sup>1308</sup> Small mugs imitating jug forms are also known: these thick-walled pieces are usually carelessly made.<sup>1309</sup>

#### *Mugs with low neck (Types I/1–7; Fig. 48)*

The neckline lies in the upper third or halfway down the vessel body. Most of the pieces assigned to this category (Types I/1–2 and 5–6) represent copies of Somogyvár–Vinkovci mugs, rather than a basic vessel type. That Types I/1 and I/6 were copies of the Somogyvár–Vinkovci's mugs is indicated also by the fact that many of them appear in the burial from Tata–Tófarok, assigned to the late Makó–Kosihy–Čaka period. The other types too are represented by a single or a few vessels at the most, and neither can they be classed among the culture's extremely good quality vessels. Type I/7, known from Börzönce, differs slightly from the others.

#### *Type I/1*

Mug with curved, cylindrical neck and rounded shoulder. The handle spans the rim and the shoulder. It comes in several sizes, with a height ranging from 4 cm to 11 cm. This variant was quite frequent at Börzönce.<sup>1310</sup> The neckline is sometimes accentuated with an incised line.<sup>1311</sup> A variant with a more rounded body is known from Tihany–Láp.<sup>1312</sup> Coarsely made pieces have been found in eastern and north-

<sup>1305</sup> Bondár (1995) 205–206.

<sup>1306</sup> *Ibidem* Pl. 180. 429.

<sup>1307</sup> E.g. Szava: *Ecsedy* (1979a) Taf. I. 2, 4–5, Taf. II. 1–2, Taf. VIII. 2, Taf. IX. 2–4, 7.

<sup>1308</sup> Some mugs have an incised pattern on the shoulder, as the one from Nagyvejké: *Pl. 48. I*, in this volume.

<sup>1309</sup> Börzönce: Bondár (1995) Pl. 175. 371; Somogyvár–Kupavárhegy: *Pl. 19. 3*, in this volume.

<sup>1310</sup> Bondár (1995) Type B/1a, Pl. 173. 333, Type B/1b, Pl. 173. 334.

<sup>1311</sup> A squatter variant from Börzönce: *ibidem* Type Ko/2c, Pl. 175. 371.

<sup>1312</sup> MRT 2, Site 45/16, Pl. 6. 5.

eastern Transdanubia.<sup>1313</sup> A comparable mug was deposited in the Makó–Kosihy–Čaka cremation burial from Tata–Tófarok.<sup>1314</sup>

Type I/2

Coarsely made mug with cylindrical neck and body. The handle springs from the rim to the shoulder.<sup>1315</sup>

Type I/3

A variant with curved, cylindrical neck and rounded, elongated body is known from Kéthely. The neckline is in the vessel's upper third. The handle, probably springing from the rim, broke off.<sup>1316</sup>

Type I/4

Mug with low, flaring neck and rounded shoulder. The handle spans the rim and the shoulder.<sup>1317</sup>

Type I/5

Handled mug with low neck and elongated, ovoid body. Two pieces of this type were found at Lovasberény.<sup>1318</sup>

Type I/6

Sharply carinated biconical mug with narrow, cylindrical neck. The strap handle connects the rim and the shoulder. The pieces assigned to this category all come from assemblages whose attribution to the Somogyvár–Vinkovci culture is controversial and rather reflect the culture's northward expansion or the adoption of the Somogyvár–Vinkovci style. They can be regarded as copies of genuine Somogyvár–Vinkovci wares. Mugs of this type have so far only been found at Tata–Tófarok and Vajta.<sup>1319</sup> The other mugs from Tata appear to represent a more gently curving variant of this type.<sup>1320</sup>

Type I/7

Mug with low, cylindrical neck and strongly rounded body. The handle spans the rim and the shoulder.<sup>1321</sup>

*Biconical mugs with tall, curved neck (Types I/8–11; Fig. 48)*

The centre of gravity lies in the vessel's lower third. This vessel type, appearing in the southern Transdanubian distribution, is one of the culture's hallmarks. Mugs of Type I/9 are known from the Makó/Somogyvár transitional burials in northern Transdanubia.

Type I/8

Gently carinated biconical mug with tall, curved, cylindrical neck. The handle springs from the rim to the shoulder. The neckline is emphasized with an incised line.<sup>1322</sup> A taller variant appears among the jugs.

<sup>1313</sup> Vajta: Makkay (1970) Fig. 30. 2.

<sup>1314</sup> Kalicz–Schreiber (1991) Fig. 4. 3.

<sup>1315</sup> Vajta: Makkay (1970) Fig. 30. 4.

<sup>1316</sup> Kéthely: Bóna (1965a) Pl. XIV. 11.

<sup>1317</sup> Padragkút: MRT 3, Site 47/9.

<sup>1318</sup> Bándi (1982) Abb. 12. 10–11.

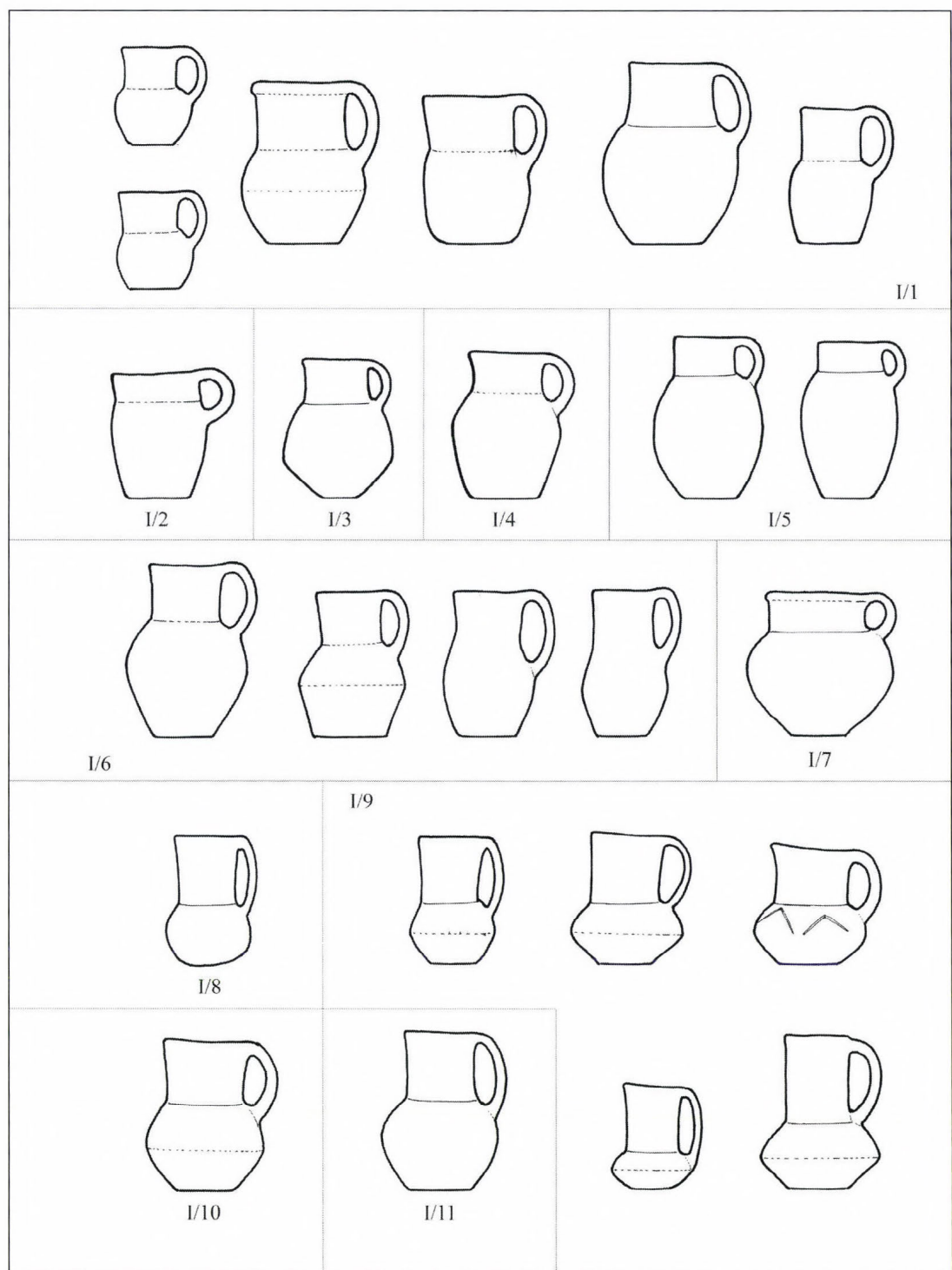
<sup>1319</sup> Vajta: Bándi (1982) Abb. 11. 3; Tata–Tófarok: Kalicz–Schreiber (1991) Fig. 4. 2.

<sup>1320</sup> Tata–Tófarok: *ibidem* Fig. 4. 1, 4.

<sup>1321</sup> Börzönce: Bondár (1995) Type B/3, Pl. 173. 345.

<sup>1322</sup> Börzönce: *ibidem* Type B/4b, Pl. 173. 331.





*Fig. 48. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Types I/1–11: mugs

Type I/1: Börzönce, Tihany–Láp, Vajta, Tata–Tófarok, I/2: Vajta, I/3: Kéthely, I/4: Padragkút, I/5: Lovasberény, I/6: Vajta, Tata–Tófarok, I/7: Börzönce; I/8: Börzönce, I/9: Börzönce, Nagyvejke, Somogyvár–Kupavárhegy and Budapest–Aranyhegyi Road, Kajárpéc–Pokolfadomb, Grave 3, I/10: Tamási, I/11: Balatonmagyaród–Hídvégpusztá

H. 4–11 cm

Type I/9

Sharply carinated biconical mug with tall, curved cylindrical neck. The handle spans the rim and the shoulder. The neckline is accentuated with an incised line.<sup>1323</sup> A variant with a shorter neck decorated with an incised zig-zag line on the shoulder is known from Nagyvejke (*Pl. 48. 1*).

Variants of this type with the handle springing from under the rim have been recovered from the so-called Makó–Kosihy–Čaka/Somogyvár transitional period and late Makó–Kosihy–Čaka burials in northern Transdanubia and the Budapest area.<sup>1324</sup>

Type I/10

A squatter, sharply carinated variant of Type I/9 with low neck.<sup>1325</sup>

Type I/11

Gently carinated biconical mug with shorter neck.<sup>1326</sup>

*Mugs with tall curved neck and conical body (Types I/12–16; Fig. 49)*

This type is the perhaps most typical ware of the Somogyvár–Vinkovci culture in Transdanubia. Considerably fewer pieces are known from the culture's distribution south of the Drava (it is not one of the common wares in Vinkovci assemblages). Appearing among the jugs, this form represents one of the most popular jug types (Type II/7).

Several variants of this mug type can be distinguished in Transdanubia. This vessel appears to have been more popular in southern Transdanubia, where variants with both a wider and narrower neck appear alongside pieces with an incised channelling-like decoration, as on the pieces from Zók and Somogyvár (Type I/12a). A variant set on four small legs has been found at Zók (Type I/12c). Pieces with a wider mouth and a handle springing from the rim to the middle of the neck appear to have been more common in northern Transdanubia, together with variants with a tall, cylindrical neck (Type I/16). Incised linear patterns occur on these mugs too, although these are more carelessly executed, as on the mug from Esztergom–Szentkirályi földék (Type I/12a). This type is frequently encountered in Makó–Kosihy–Čaka burials,<sup>1327</sup> indicating contact between the two cultures.

Type I/12

Mugs with tall, curved neck and squat, conical body. Several variants can be distinguished based on the position of the handle, and the width and decoration of the neck. On some pieces, the handle spans the rim and shoulder;<sup>1328</sup> while the specimens from Somogyvár–Kupavárhegy have the handle springing from

<sup>1323</sup> Somogyvár–Kupavárhegy: *Bóna* (1965a) Pl. X. 5, cp. *Pl. 7. 1*, in this volume; a variant with a less pronounced carination: Börzönce: *Bondár* (1995) Type B/4b, Pl. 173. 334.

<sup>1324</sup> Kajárpéc–Grave 3: *Figler* (1996a) Pl. III. 4; Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1994) Abb. 3. 3.

<sup>1325</sup> Tamási: *Pl. 52. 2*, in this volume.

<sup>1326</sup> Balatonmagyaród–Hídvégpuszta: *Bondár* (1996b) Fig. 16.

<sup>1327</sup> Budapest–Aranyhegyi Road: *Kalicz-Schreiber* (1991) Abb. 2. 3.

<sup>1328</sup> Börzönce: *Bondár* (1995) Type B/4a, 4c–d, Pl. 173. 332, 335, 338; Pécs–Nagyárpád: *Bándi* (1981) Taf. 7. 5; Nagyatád–Simongát: *Bóna* (1965a) Fig. 1. 6; Balatonhídvégpuszta–(Zalavár): unpublished; base fragments: Lengyel: *ibidem* Pl. XV. 11, 14; Nagyvejke: *Bóna* (1972) Fig. 1. 1, 3, Pl. 4. 2–4; Somlóhegy–Séd forrás: MRT 3, Pl. 21. 1.



under the rim. Variants with a wide mouth<sup>1329</sup> and a narrow neck<sup>1330</sup> both occur. On some mugs, the handle spans the rim and the middle of the neck<sup>1331</sup> or the handle rising above the rim spans the rim and the middle of the neck.<sup>1332</sup> Another variant has a narrower neck;<sup>1333</sup> Type I/12a represents a decorated variant. Mugs resembling these pieces have been found in the Makó–Kosihy–Čaka burials uncovered at Budapest–Aranyhegyi Road.<sup>1334</sup>

#### Type I/12a

The decorated variant of Type I/12. The design generally takes the form of an incised line or zig-zag motifs on the shoulder and the carination, decorative elements which also appear on jugs of Type II/7b. This type is predominantly known from sites in County Baranya,<sup>1335</sup> although one piece decorated with a triple zig-zag line between the neck and the carination has been found at Somogyvár.<sup>1336</sup> Mugs of this type with a carelessly incised pattern under the handle, on the neck and on the base are known from north-eastern Transdanubia.<sup>1337</sup>

#### Type I/12b

A variant with a perceptible break halfway down the neck and an emphatic line at the junction of the neck and the conical body. The handle springs from under the rim.<sup>1338</sup>

#### Type I/12c

The body is rectangular and the vessel is set on four small knobs. The single known example comes from Zók–Várhegy.<sup>1339</sup>

#### Type I/13

A variant of the mugs with narrow, curved neck, but with a more rounded body. The handle connects the rim and the middle of the neck.<sup>1340</sup>

#### Type I/14

Mug with wide mouth and curved, elongated neck. The handle is set halfway down the neck.<sup>1341</sup>

<sup>1329</sup> Bóna (1965a) Pl. X. 1, cp. Pl. 6. 7, in this volume.

<sup>1330</sup> *Ibidem* Pl. X. 6, 7, cp. Pl. 6. 5–6, in this volume; Somogyvár–Kupavárhegy: Pl. 21. 8, in this volume; for additional fragments, cp. Pl. 8. 2, in this volume.

<sup>1331</sup> Somogyvár–Kupavárhegy: Pl. 21. 9, in this volume; Keszthely–Fenékpuszta: Bóna (1965a) Pl. XIV. 3; Rajka: Figler (1996a) Abb. 9. 2; Esztergom–Szentkirályi földek: Bóna (1965a) Pl. XII. 9.

<sup>1332</sup> Dörgicse–Aszó (Alsódörgicse): Bóna (1965a) Pl. XIV. 13.

<sup>1333</sup> Esztergom–Szentkirályi földek: *ibidem* Pl. XII. 8.

<sup>1334</sup> Budapest–Aranyhegyi Road: Kalicz–Schreiber (1994) Abb. 3. 5, 7, 8.

<sup>1335</sup> Szava: Ecsedy (1979a) 101, A/1; Zók–Várhegy: Bóna (1965a) Pl. XVI. 9; Ecsedy (1983a) Pl. IV. 2.

<sup>1336</sup> Somogyvár–Kupavárhegy: Bóna (1965a) Pl. X. 4, and Pl. 6. 4, in this volume.

<sup>1337</sup> Esztergom–Szentkirályi földek: MRT 5, Pl. 9. 1.

<sup>1338</sup> Nagyvejke: Bóna (1972) Fig. 1. 2; Somogyvár–Kupavárhegy: Bóna (1965a) Pl. X. 2, cp. Pl. 6. 3, in this volume; Tamási: Pl. 52. 2, in this volume.

<sup>1339</sup> Ecsedy (1983a) Pl. IV. 3.

<sup>1340</sup> Karád: Pl. 30. 7, in this volume; Somogyvár–Kupavárhegy: Pl. 13. 2, in this volume; for a variant with a less narrow neck, cp. Lengyel: Bóna (1965a) Pl. XV. 5.

<sup>1341</sup> Börzönce: Bondár (1995) Type B/2, Pl. 175. 374.

#### Type I/14a

A wide-mouthed, squat mug variant. A thick-walled, “heavy” variant is known from Somogyvár.<sup>1342</sup> A specimen with a less prominent carination from Sármellék can also be assigned here,<sup>1343</sup> as can a small mug from Balatonberény, which was earlier assigned to the Nagyrév culture.<sup>1344</sup> While the biconical pots of the Nagyrév culture can most likely be derived from the Somogyvár mugs with curved neck, the Balatonberény site lies beyond the Nagyrév distribution and the mug’s form fits in better with the less widespread Somogyvár mug types. A slightly larger variant, with a height of 14 cm, is known from the Makó–Kosihy–Čaka settlement at Ziersdorf.<sup>1345</sup>

#### Type I/15

Mug with tall, cylindrical neck, emphatic shoulder and conical lower part.<sup>1346</sup> One of the mugs from the Makó–Kosihy–Čaka burials uncovered at Budapest–Aranyhegyi Road can also be assigned here.<sup>1347</sup>

#### Type I/16

Sharply carinated mug with tall, cylindrical neck. The neck is occasionally decorated with a tiny knob under the rim. The handle is set halfway down the neck.<sup>1348</sup> A similar mug with a flaring neck is known from Lovasberény.<sup>1349</sup> This type has so far only been found in northern Transdanubia.

#### *Rare forms (Types I/17–22; Fig. 49)*

Several forms, such as pear shaped mugs, occur but rarely in the ceramic inventory of the Somogyvár–Vinkovci culture.

#### Type I/17

Small, pear shaped mug with curved neck and a handle springing from the rim. Comparable pieces are known from Pécs–Nagyárpád<sup>1350</sup> and Somogyvár–Kupavárhegy.<sup>1351</sup> Similar mugs with a wide strap handle were common towards the end of the Vučedol period.<sup>1352</sup>

#### Type I/18

Small handled mug with narrow mouth and rounded shoulder resembling Type I/17. The handle spans the rim and the shoulder.<sup>1353</sup>

#### Type I/19

A small cup or mug with an S profile was found at Pécsvárad.<sup>1354</sup>

<sup>1342</sup> Somogyvár–Kupavárhegy: *Pl. 19. 3*, in this volume.

<sup>1343</sup> Sármellék–Fenéki Road: *Bóna* (1965a) *Pl. XIV. 4*.

<sup>1344</sup> *Bóna* (1963) 13, *Pl. VIII. 10*.

<sup>1345</sup> *Hasenhündl* (1997) *Abb. 399*.

<sup>1346</sup> Győrszemere–Tóth tag (base fragment): *Figler* (1996a) *Abb. 8. 10*; Rajka: *Figler* (1994) *Abb. 9. 3, 6*. Somogyvár–Kupavárhegy: *Pl. 17. 10*, in this volume.

<sup>1347</sup> *Kalicz-Schreiber* (1994) *Abb. 2. 3*.

<sup>1348</sup> Környe: *Bóna* (1963) *Pl. XII. 4*.

<sup>1349</sup> *Bándi* (1982) *Abb. 12. 8*.

<sup>1350</sup> *Bándi* (1984a) *Taf. XXXa. 8*.

<sup>1351</sup> *Bóna* (1965a) *Pl. X. 9*. The handle on the shoulder is a reconstruction.

<sup>1352</sup> Vučedol: *Schmidt* (1945) *Taf. 34. 4*.

<sup>1353</sup> Nagykanizsa–Inkey kápolna: *Horváth* (1983b) *Fig. 5. 13*.

<sup>1354</sup> *Bóna* (1965a) 43, *Pl. XVI. 15*. The published photo suggests that it was handleless.



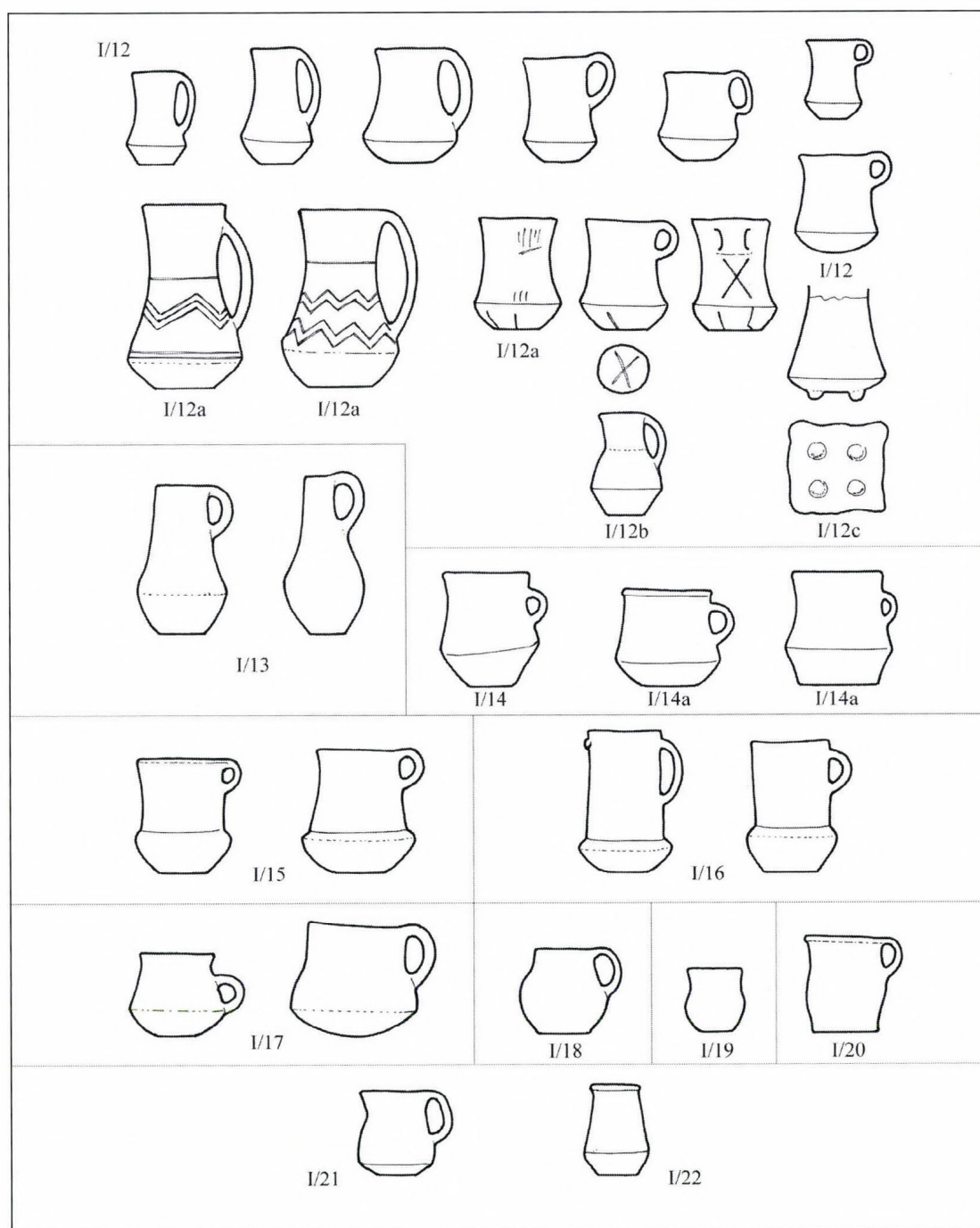


Fig. 49. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia

Types I/12–22: mugs

Type I/12: Börzönce, Dörgicse–Aszó, Esztergom–Szentkirályi földek, Keszthely–Fenékpuszt, Lengyel, Nagyatád–Simongát, Nagyvejke, Pécs–Nagyárpád, Rajka, Somlóhegy–Sédforrás, Somogyvár–Kupavárhegy, I/12a: Somogyvár–Kupavárhegy, Zók–Várhegy and Esztergom–Szentkirályi földek, I/12b: Somogyvár–Kupavárhegy, I/12c: Zók–Várhegy, I/13: Lengyel, Karád, I/14: Börzönce, I/14a: Sármellék, Somogyvár–Kupavárhegy, I/15: Rajka and Budapest–Aranyhegyi Road, Grave, I/16: Környe, Lovasberény; I/17: Pécs–Nagyárpád, Somogyvár–Kupavárhegy, I/18: Nagykanizsa–Inkey kápolna, I/19: Pécsvárad, I/20: Keszthely–Fenékpuszt, I/21: Keszthely–Fenékpuszt, I/22: Lengyel

H. 3–12 cm

Type I/20

Small handled mug with wide mouth, strongly everted rim and slightly curved body.<sup>1355</sup>

Type I/21

Small handled mug with wide mouth, slightly flaring neck and rounded shoulder.<sup>1356</sup>

Type I/22

Mug with low, cylindrical neck, long curved shoulder and conical lower part.<sup>1357</sup>

## II. Jugs (Figs 50–52)

Two main jug types can be distinguished in Transdanubia: biconical jugs with cylindrical neck and jugs with tall, curved neck. Each type has several variants. Incised linear patterns and fluting were predominantly used to decorate jugs with tall, curved neck; jugs decorated in this manner are mostly known from south-eastern Transdanubia, as are the variants with divided handle (Type II/7e, Type II/8b–c). While the distribution of jugs with incised and fluted decoration extends to Somogyvár–Kupavárhegy in the north, vessels with divided handle are known exclusively from the southern part of County Baranya and the southerly regions of the Danube–Tisza Interfluvium. Ribbed decoration too appears to have been more popular in the culture's southern distribution, at least judging by the assemblages from Nagyvejte, Pécs–Nagyárpád Somogyvár and Zók.

### *Biconical jugs with cylindrical neck (Types II/1–4; Fig. 50)*

Type II/1

Gently carinated biconical jug with slightly flaring neck.<sup>1358</sup> The handle spans the rim and the shoulder. The neckline is highlighted with an incised line. Similarly to the other mug and jug types, the jugs assigned to this category have similar proportions and only vary as regards smaller traits. Some pieces have a conical shoulder,<sup>1359</sup> and a variant with wide mouth and cylindrical neck can also be distinguished.<sup>1360</sup> The handle is sometimes grooved.<sup>1361</sup>

One rare find is a small piece decorated with a pattern of lime encrusted circles from Kajárpéc–Pokolfadomb, whose handle springs from the rim. This jug was recovered from one of the transitional burials of the Makó–Kosihy–Čaka and Somogyvár cultures.<sup>1362</sup>

<sup>1355</sup> Keszthely–Fenékpuszt: *Bóna* (1965a) Pl. XIV. 2.

<sup>1356</sup> Keszthely–Fenékpuszt: MRT 1, Pl. 7. 7.

<sup>1357</sup> Lengyel: *Bóna* (1965a) Pl. XV. 18. The published photo suggests that it did not have a handle.

<sup>1358</sup> Börzönce: *Bondár* (1995) Type K/1, Pl. 173. 347, 349; Kajárpéc–Pokolfadomb, Grave 1: *Figler* (1996a) Abb. 10. 1; Kemendollár: *Bóna* (1965a) 42, Pl. XVI. 10; Kéthely: *ibidem* Pl. XIV. 10; Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 12; Pécsvárad: *Bóna* (1965a) 43, Pl. XVI. 17; Rajka: *Figler* (1994) Abb. 9. 4; Somogyvár–Kupavárhegy: *Bóna* (1965a) Pl. X. 8, cp. also Pl. 7. 2, 11. 2, Pl. 20. 4, in this volume.

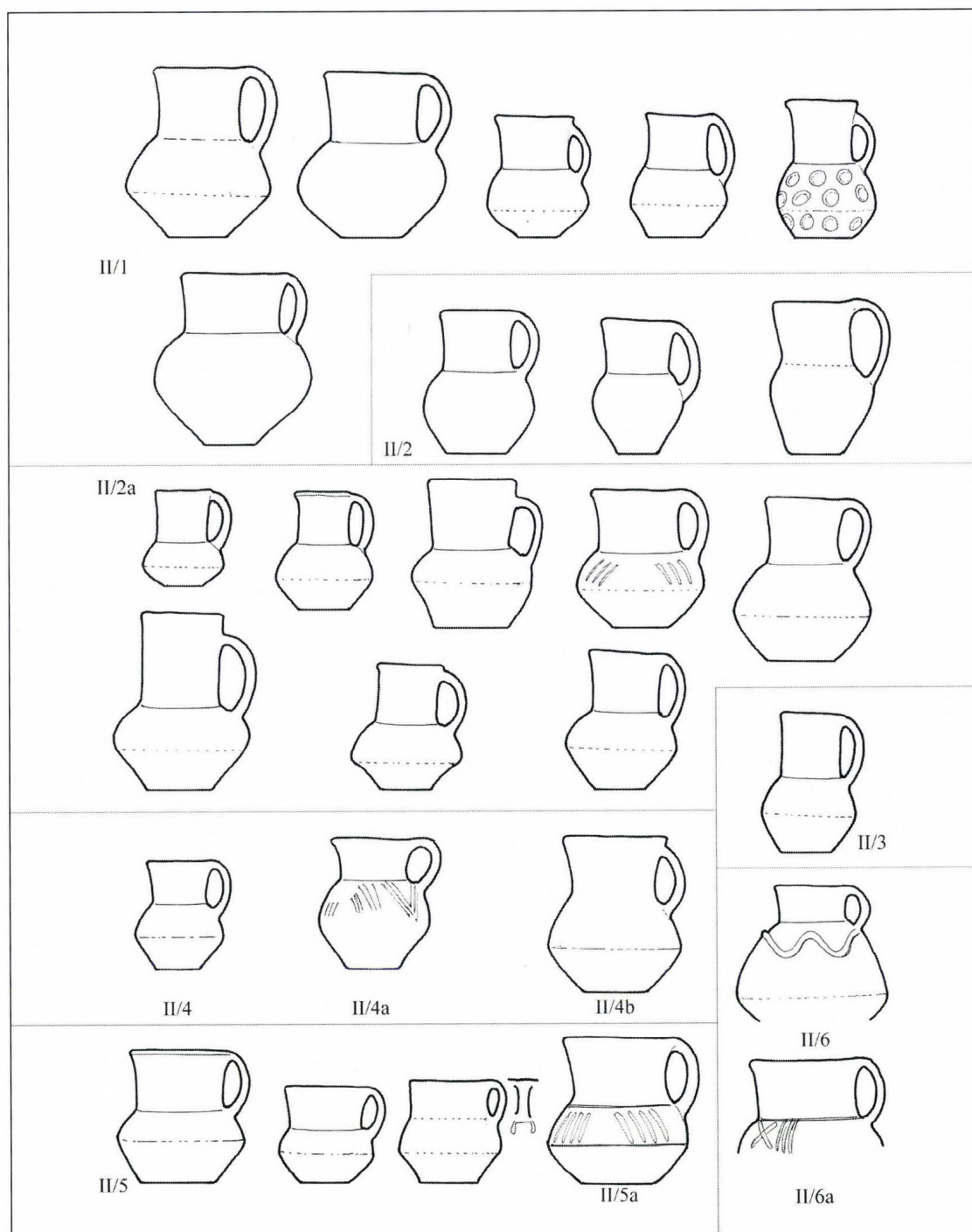
<sup>1359</sup> Rajka: *Figler* (1994) Abb. 9. 4.

<sup>1360</sup> Kéthely: *Bóna* (1965a) Pl. XIV. 10.

<sup>1361</sup> Somogyvár–Kupavárhegy: Pl. 20. 6, in this volume.

<sup>1362</sup> Kajárpéc–Grave 1: *Figler* (1996a) Abb. 10. 1.





*Fig. 50. Vessel types of the Somogyvár-Vinkovci culture in Transdanubia*

Types II/1–6: jugs

Type II/1: Börzönce, Kemendollár, Kéthely, Rajka, Somogyvár–Kupavárhegy and Kajárpéc–Pokolfadomb, Grave 1, II/2: Börzönce, Koroncó, II/2a: Börzönce, Lengyel, Pókaszeptk, Sármellék, Vajta, Csabrendek,

Esztergom–Tábor, Budapest–Aranyhegyi Road, II/3: Börzönce,

II/4: Börzönce, II/4a: Keszthely–Lehenrét, II/4b: Zók–Várhegy;

II/5: Pécs–Nagyárpád, Szombathely–Jáki Road, II/5a: Zók–Várhegy;

II/6: Pécs–Nagyárpád, II/6a: Somogyvár–Kupavárhegy

H. 10–20 cm

#### Type II/2

Gently carinated biconical jug with narrow, cylindrical neck. The wide strap handle connects the rim and the shoulder. A variant with a more slender body is known from Koroncó.<sup>1363</sup>

#### Type II/2a

Gently carinated biconical jug with narrow, cylindrical neck. The wide strap handle spans the rim and the shoulder. The rim is slightly thickened.<sup>1364</sup> One variant is decorated with a smoothed-in linear design.<sup>1365</sup>

Variants which have the handle attached under the rim are known from northern Transdanubia, where pieces with a cylindrical, slightly flaring neck<sup>1366</sup> and very narrow cylindrical neck<sup>1367</sup> were also used in addition to the variant with curved neck.<sup>1368</sup> Comparable vessels from Budapest–Aranyhegyi Road can be assigned to the category of mugs, rather than jugs. Variants of these biconical jugs with tall neck and the handle spanning the neck appear in the early Nagyrév period.<sup>1369</sup>

#### Type II/3

Sharply carinated biconical jug with narrow, cylindrical neck. The strap handle spans the rim and the shoulder.<sup>1370</sup> A similar form with shorter neck occurs among the mugs (Type I/6).

#### Type II/4

A less widespread sharply carinated biconical jug type with curved, cylindrical neck. The strap handle connects the rim and the shoulder. The neckline is highlighted with an incised line.<sup>1371</sup> The lower half of a similar jug with more rounded shoulder is known from Somogyvár–Kupavárhegy (*Pl. 14. 12*).

#### Type II/4a

Biconical jug with slightly flaring, low neck.<sup>1372</sup> The handle springs from the rim to the shoulder, which is decorated with an incised zig-zag pattern.

#### Type II/4b

Biconical jug with slightly flaring neck. The handle springs from the rim.<sup>1373</sup>

<sup>1363</sup> Börzönce: *Bondár* (1995) Type K/2a, Pl. 173. 346; Koroncó: *Bóna* (1965a) Pl. XII. 1–2.

<sup>1364</sup> Börzönce: *Bondár* (1995) Type K/2a, Pl. 173. 348. For comparable pieces from Pókaszeptek, cp. *Bóna* (1965a) Pl. XIV. 12; Sármellék–Fenéki Road: *Bóna* (1965a) Pl. XIV. 7; for a variant with a pronounced carination from Lengyel: *Bóna* (1965a) Pl. XV. 9; fragment of an upper part: Dörgicse–Aszó: *Bóna* (1965a) Pl. XIV. 15.

<sup>1365</sup> Vajta: *Bándi* (1982) Abb. 11. 3.

<sup>1366</sup> Esztergom: *Bóna* (1965a) Pl. XII. 10; Kajárpéc–Grave 1: *Figler* (1994) Abb. 10. 9.

<sup>1367</sup> Csabrendek (Somlyóvásárhely): *Bóna* (1965a) Fig. 1. 8.

<sup>1368</sup> Budapest–Aranyhegyi Road, burial: *Kalicz-Schreiber* (1994) Abb. 3. 4.

<sup>1369</sup> Alsónémedi: *Kalicz* (1957) Taf. XXXIII. 12.

<sup>1370</sup> Börzönce: *Bondár* (1995) Type Ko/1, Pl. 173. 339, 343.

<sup>1371</sup> Börzönce: *ibidem* Type Ko/2a, Pl. 173. 337.

<sup>1372</sup> Keszthely–Lehenrét: MRT 1, Site 21/56, Pl. 7. 12.

<sup>1373</sup> Zók–Várhegy: *Ecsedy* (1983a) Pl. IV. 6.



*Wide-mouthed jugs with slightly flaring neck (Type II/5; Fig. 50)*

Type II/5

Wide-mouthed biconical jug with slightly flaring neck. The handle spans the rim and the shoulder.<sup>1374</sup> A comparable, but coarser piece is known from the Szombathely–Jáki Road site,<sup>1375</sup> where a wide strap handle with a rib on the lower half from a similar jug was also found.<sup>1376</sup>

Type II/5a

A rare variant decorated with a rib on the shoulder.<sup>1377</sup>

*Jugs with low cylindrical neck and conical shoulder (Type II/6; Fig. 50)*

The most popular jug type on the Vinkovci settlements in Slavonia and the Srem (Fig. 69. 8–9) appears to have been much less widespread in Transdanubia.

Type II/6

Biconical jug with low, cylindrical neck and rounded conical shoulder. The handle spans the rim and the shoulder. A wavy cordon is set on the shoulder. The upper half of a similar jug is known from Pécs–Nagyárpád,<sup>1378</sup> and a similar cordon-decorated piece was found at Nagyvejke (Pl. 48. 11).

Type II/6a

A variant decorated with an incised linear design on the shoulder was found at Somogyvár–Kupavárhegy (Pl. 9. 4).

*Jugs with tall, curved neck and squat, conical lower part (Types II/7–8; Fig. 51)*

This jug type is one of the most distinctive types in Transdanubia. Several variants are known north of the River Drava and from the assemblages of the Somogyvár–Ada group found in the southern part of the Danube–Tisza Interfluvium, as well as from the Glina III–Schneckenberg and Roşia groups, and in Transylvania. In contrast, this jug type is lacking from the culture's distribution in the Srem and Slavonia. The variant with divided handle occurs on settlements in the southern part of County Baranya (e.g. at Szava, Zók and Pécs–Nagyárpád) and among the grave pottery of the inhumation burials in the southern half of the Danube–Tisza Interfluvium,<sup>1379</sup> as well as on late Makó–Kosihy–Čaka settlements.<sup>1380</sup>

Type II/7

Sharply carinated jug with tall, curved neck and squat, conical lower part. The vessel's centre of gravity lies in the lower third. The smaller sized mug variant (Type I/12) of this jug form was much more widespread.

<sup>1374</sup> Pécs–Nagyárpád: Bándi (1973) Pl. III; *idem* (1984a) Taf. XXIX. 5.

<sup>1375</sup> Károlyi (1971–72) Pl. I. 2.

<sup>1376</sup> *Ibidem* Pl. I. 5.

<sup>1377</sup> Zók: Vulić–Grbić (1939) Pl. 18. 1.

<sup>1378</sup> Bándi (1981) Taf. 7. 7.

<sup>1379</sup> Horváth (1984a) 10, 20, Tab. I. 1–2.

<sup>1380</sup> Cp. Battonya–Aradi Road I: G. Szénászký (1987–88) Fig. 5. 1; Tiszakürt–Homoki szőlő: Csányi (1996) 55, Pl. II. 4, Pl. XV. 3.

Differences can be noted in the surface treatment of this vessel: in addition to the more general matte surface, polished pieces too appear.<sup>1381</sup>

Several variants can be distinguished, based on the width of the mouth and neck, the curvature of the neck and the type of carination. The carination is sometimes accentuated with an incised line.<sup>1382</sup> A folded out rim, resembling the form on larger pots, can be noted on a few specimens.<sup>1383</sup>

#### Type II/7a

Jugs of this type with an emphatic shoulder line appear to have been more popular in north-western Transdanubia.<sup>1384</sup> A rib is occasionally set under the wide strap handle.<sup>1385</sup> One rare variant is the piece decorated with an incised geometric pattern of lozenges on the handle and the neck found at Neusiedl am See in a burial.<sup>1386</sup>

#### Type II/7b

This type is the southern Transdanubian decorated variant of the jug. Aside from the pieces from the southern part of County Baranya, the type is known from Somogyvár and the settlements established during the Vučedol period in County Tolna. Several variations can be distinguished in the decoration of these jugs. The most simple adornment is made up of a single, double or triple line incised around the carination.<sup>1387</sup> Some pieces are decorated with a zig-zag pattern set between bundles of lines on the neck and the carination,<sup>1388</sup> occasionally combined with flat, longish knobs on the belly.<sup>1389</sup> A cross motif made up of bundles of lines is sometimes placed on the neck above the incised lines encircling the carination.<sup>1390</sup> One pattern, observed only at Zók, is a design of parallel zig-zag lines around the neck<sup>1391</sup> appearing also on the smaller mugs (cp. Type I/12a). A jug from Nagyvejke has a rib/cordon on the neck instead of the incised motifs.<sup>1392</sup>

#### Type II/7c

This jug type has the handle set halfway down the neck. A smaller and a larger sized specimen is known from Pécs–Makárhegy.<sup>1393</sup> The pattern of parallel zig-zag lines adorning these jugs matches the decoration on the jugs and mugs from Zók (cp. Type II/7b).

<sup>1381</sup> Börzönce: *Bondár* (1995) Type Ko/2b, Pl. 173. 341; Szava: *Ecsedy* (1979a) 101, A/1, Taf. V. 3, Taf. VIII. 1, Taf. IX. 4, Taf. XII. 6; Zók–Várhegy: *Ecsedy* (1983a) Pl. IV. 7; Pécs–Nagyárpád: *Bándi* (1973) Pl. III; Döbrököz–TSZ Silógödör: *Pl. 43. 3*, in this volume; Somogyvár–Kupavárhegy: *Pl. 9. 1, Pl. 18. 7*, in this volume; Lengyel: *Bóna* (1965a) Pl. XV. 4, 8, 15–17.

<sup>1382</sup> Somogyvár–Kupavárhegy: *Pl. 8. 2–4, Pl. 15. 4*, in this volume.

<sup>1383</sup> Somogyvár–Kupavárhegy: *Pl. 19. 12*, in this volume.

<sup>1384</sup> Gönyű–Hömbölgő: *Bóna* (1965a) Pl. XIII. 4; Győr–Szabadhegy: *Bóna* (1965a) Pl. XIII. 3.

<sup>1385</sup> Neusiedl am See: *Pittioni* (1954) Abb. 120. 2.

<sup>1386</sup> *Pittioni* (1954) Abb. 120. 1.

<sup>1387</sup> Pécs–Nagyárpád: *Bándi* (1979) 65, Fig. 3; Szava: *Ecsedy* (1979a) A/1, 101, Taf. II. 2.

<sup>1388</sup> Szava: *Ecsedy* (1979a) A/1, 101, Taf. I. 1, Taf. II. 2, Taf. V. 4, Taf. VIII. 2, Taf. IX. 4; Pécs–Nagyárpád: *Bándi* (1981) Taf. 4. 7; Somogyvár–Kupavárhegy: *Pl. 10. 14–16, Pl. 23. 1, 4, Pl. 25. 1*, in this volume; Döbrököz–Tüzköves: *Pl. 43. 4*, in this volume.

<sup>1389</sup> Somogyvár–Kupavárhegy: *Pl. 20. 9*, in this volume.

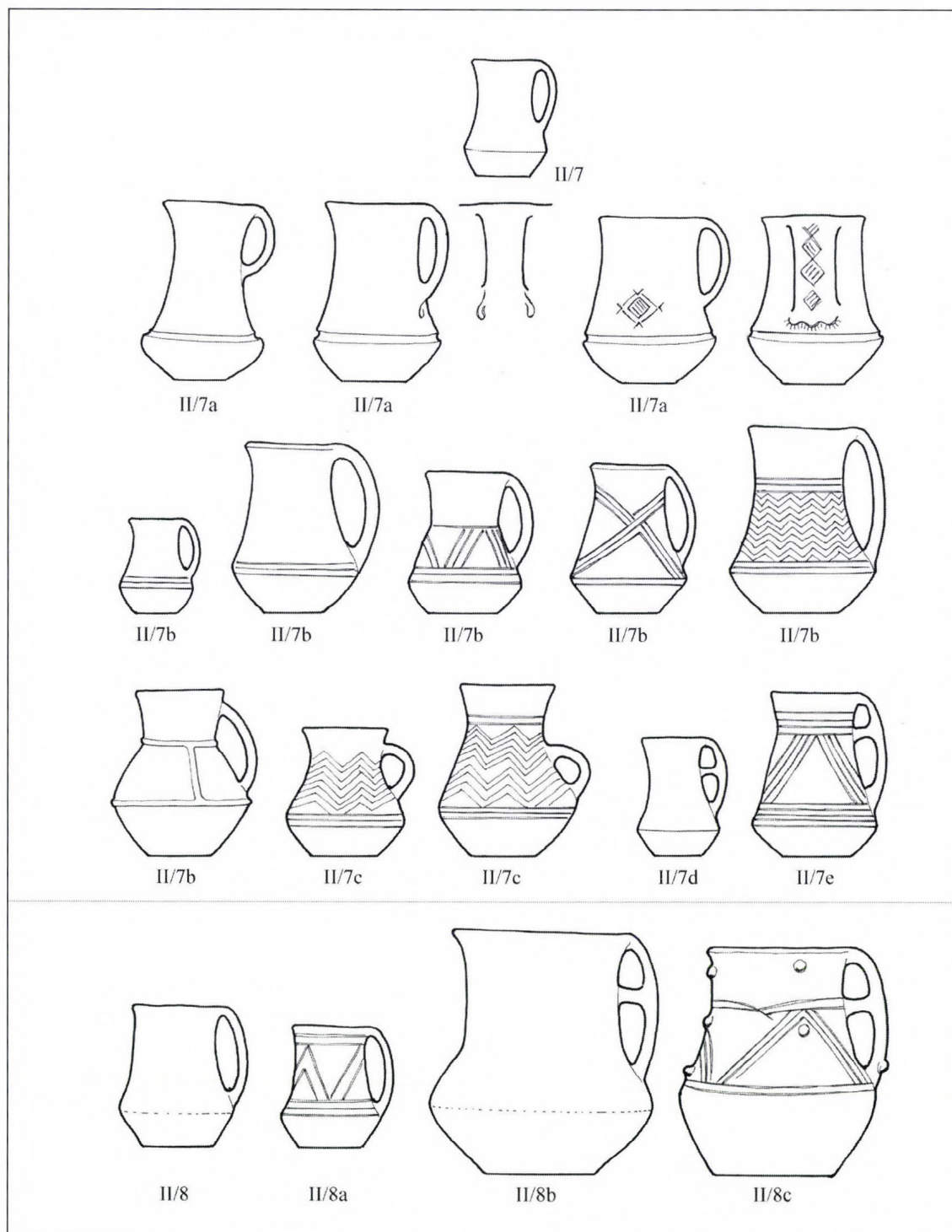
<sup>1390</sup> Pécs–Nagyárpád: *Bándi* (1984a) Taf. XXIX. 6.

<sup>1391</sup> Zók–Várhegy: *Bóna* (1965a) Pl. XVI. 8; *Ecsedy* (1983a) Pl. IV. 4.

<sup>1392</sup> *Bóna* (1972) Fig. 1. 4.

<sup>1393</sup> *Bóna* (1965a) 44, Pl. XVI. 1–2.





*Fig. 51. Vessel types of the Somogyvár-Vinkovci culture in Transdanubia*

Types II/7–8: jugs

Type II/7: Szava, II/7a: Gönyű–Hömbölgő, Győr–Szabadhegy, Neusiedl am See, II/7b: Pécs–Nagyárpád, Somogyvár–Kupavárhegy, Szava, Zók–Várhegy, Nagyvejke, II/7c: Pécs–Makárhegy, II/7d: Pécs–Nagyárpád, II/7e: Szava;

II/8: Szava, II/8a: Szava, II/8b: Szava, II/8c: Pécs–Nagyárpád

H. 12–30 cm

#### Type II/7d

An undecorated variant with divided handle of Type II/7.<sup>1394</sup>

#### Type II/7e

The decorated variant of Type II/7d. Examples of this type with an incised pattern on the neck, the shoulder and the carination have so far only been found on the Szava settlement.<sup>1395</sup>

#### Type II/8

Resembling Type II/7, this jug variant has a more emphatic shoulder.

#### Type II/8a

The decorated variant of Type II/8. The pattern is made up of heavily or lightly incised zig-zag lines set between bundles of lines encircling the neck under the rim and on the carination.<sup>1396</sup>

#### Type II/8b

The variant with divided handle includes quite large sized pieces, often as high as 30 cm. Decorated and plain variants have both been found. A large jug from Szava with tall, curved neck has two tiny knobs set on either side of the divided handle.<sup>1397</sup>

#### Type II/8c

A large, rather squat variant decorated with a combination of heavily and lightly incised linear motifs on the neck and the carination. A tiny knob adorns the lower part of the handle.<sup>1398</sup>

#### *Jugs with curved neck and rounded shoulder (Types II/9–10; Fig. 52)*

This jug type represents a continuation of Vučedol traditions. It first appeared in the Vučedol C period,<sup>1399</sup> and its distribution includes the regions south of the River Drava.<sup>1400</sup> Jugs of this type have been found at Pécs–Nagyárpád and Szava.

#### Type II/9

Wide-mouthed jug with curved neck, rounded shoulder and conical lower part. The handle spans the rim and the neckline.<sup>1401</sup> The variants include decorated (Type II/10) and two-handled pieces (Type III/1).

#### Type II/9a

A wide-mouthed, squatter variant.<sup>1402</sup>

<sup>1394</sup> Pécs–Nagyárpád: *Bándi* (1979) Taf. 10. 5; Zók–Várhegy: *Ecsedy* (1983a) Fig. 26.

<sup>1395</sup> Szava: *Ecsedy* (1979a) A/2, 101, Taf. IX. 3.

<sup>1396</sup> Szava: *ibidem* Taf. VIII. 2.

<sup>1397</sup> Szava: *ibidem* A/2, 101, Taf. VIII. 3.

<sup>1398</sup> Pécs–Nagyárpád: *Bándi* (1973) Pl. III; *idem* (1984a) Taf. XXIX. 7.

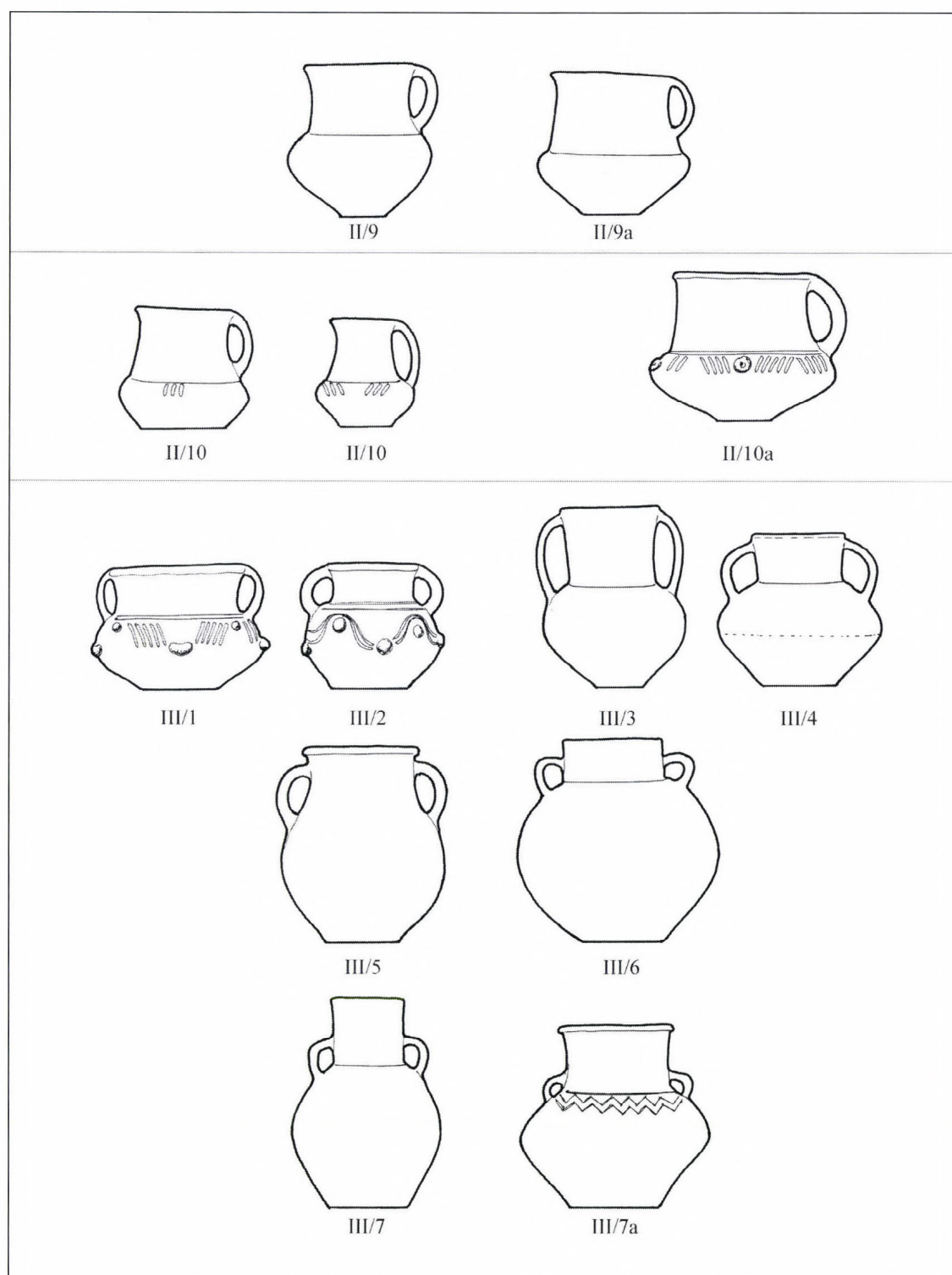
<sup>1399</sup> Lányesók, Pit 3: *Ecsedy* (1980) Pl. I. 15.

<sup>1400</sup> Batrovci–Gradina: *Tasić* (1984) Taf. III. 1.

<sup>1401</sup> Pécs–Nagyárpád: *Bándi* (1981) Taf. 4. 2.

<sup>1402</sup> Pécs–Nagyárpád: *ibidem* Taf. 4. 8.





*Fig. 52. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Types II/9–10: jugs and Type III: two-handled jugs

Type II/9–9a: Pécs–Nagyárpád, II/10–10a: Szava;

Type III/1–2: Szava, III/3: Somogyvár–Kupavárhegy, III/4: Nagyvejke, III/5: Szombathely–Jáki Road,

III/6: Illmitz, III/7: Somogyvár–Kupavárhegy, III/7a: Keszthely–Fenékpuszta

H. 6.8–25 cm

#### Type II/10

The decorated variant of this jug type.<sup>1403</sup> The handle connects the rim and the neck or the shoulder. The shoulder is decorated with oblique fluting. The form also appears among the two-handled jugs (Type III/1).

#### Type II/10a

A wide-mouthed, squat, decorated variant of this jug type. The shoulder is decorated with fluting and three flat knobs are set on the carination in a symmetric arrangement.<sup>1404</sup>

### III. Two-handled jugs (Fig. 52)

Assigned to this type are the two-handled variants of one-handled jugs (Types III/1–4) and the small amphora-like two-handled vessels with narrow, cylindrical neck (Types III/5–7). Jugs of this type have been principally found on settlements, although a few pieces came to light from graves (e.g. at Illmitz and Priboj). Each variant is represented by intact vessels or pieces which could be assembled from their fragments. Most are plain with a carefully smoothed, polished surface. Similarly to other vessels, variants of this jug type decorated with fluting have been found on the Szava settlement. The height of these jugs ranges between 7 and 20 cm. The origin of some two-handled vessels can be traced to the tumulus burials at Priboj (e.g. Type III/3 from Somogyvár–Kupavárhegy), while others can be derived from the two-handled vessels of the Vučedol B2–C period brought to light on late Vučedol settlements (Types III/6–7).<sup>1405</sup> The latter include both plain pieces and specimens bearing a simple pattern. Jugs comparing well with Type III/7 can be quoted from the Nyírség culture.<sup>1406</sup>

#### Type III/1

Wide-mouthed, two-handled biconical jug with slightly flaring neck. The handles spring from the rim to the neckline. Fragments of this type have so far only been found at Szava.<sup>1407</sup> The shoulder is decorated with fluting, the carination with four symmetrically set flat knobs.

#### Type III/2

Small, gently rounded biconical jug with folded out rim and curved, cylindrical neck (H. 6.8 cm). The vessel body is decorated with flat knobs connected by curved fluted lines.<sup>1408</sup>

#### Type III/3

Gently rounded biconical vessel with curved, cylindrical neck (H. 15 cm). The two handles spring from under the rim to the shoulder.<sup>1409</sup>

<sup>1403</sup> Szava: *Ecsegy* (1979a) A/3, 101, Taf. I. 1, Taf. II. 1, Taf. IX. 2.

<sup>1404</sup> Szava: *ibidem* A/3, 101, Taf. I. 4.

<sup>1405</sup> *Dimitrijević* (1977–78) T. 18. 4, 11.

<sup>1406</sup> Tiszanagyfalu: *Kalicz* (1984b) Taf. XXVI. 7; Polgár–Kengyel-köz: *Dani* (1999) Pl. 19. 1, Pl. 35, Pl. 36. 1, Pl. 39. 1.

<sup>1407</sup> Szava: *Ecsegy* (1979a) B/1, 101, Taf. I. 5, Taf. IX. 6–8.

<sup>1408</sup> Szava: *ibidem* B/3, 101, Taf. XII. 7.

<sup>1409</sup> Somogyvár–Kupavárhegy: *Bóna* (1965a) Pl. X. 3.



#### Type III/3a

Fragment of a very narrow necked vessel. The stubs of the broken handles, which sprang from under the rim, were carefully smoothed. The exact form of the vessel is not known. It is represented by a single fragment from Somogyvár–Kupavárhegy.<sup>1410</sup>

#### Type III/4

Small biconical vessel with cylindrical neck (H. 9 cm). The two handles spring from under the rim to the shoulder.<sup>1411</sup>

#### Type III/5

Two-handled vessel with curved neck and rounded body (H. 19.5 cm). The two handles spring from under the rim to the shoulder.<sup>1412</sup> Its attribution to the Somogyvár–Vinkovci culture is uncertain.

#### Type III/6

Two-handled vessel with low, cylindrical neck and rounded body (H. 25.3 cm). The two handles are set on the neckline.<sup>1413</sup>

#### Type III/7

Small biconical amphora with cylindrical neck and rounded body (H. 20 cm). The two small strap handles span the neckline.<sup>1414</sup>

#### Type III/7a

Small, squat, biconical amphora, a slightly wider necked and decorated variant of Type III/7. The two small strap handles span the neckline. The shoulder is decorated with a bundle of three zig-zag lines in the stab-and-drag style.<sup>1415</sup>

### IV. Four-handled vessels (Fig. 53)

Assigned to this category are the vessels with two or four handles under the rim and two handles spanning the neckline. The known pieces were found at Pécs–Nagyárpád and Szava, the latter site yielding also a decorated variant. These vessels represent rare, unparalleled types.

#### Type IV/1

Large handled vessel with curved, slightly flaring neck, low conical shoulder and conical lower part. Four: small handles are attached to the rim and two handles span the neckline. Small flat knobs are set on the shoulder.<sup>1416</sup>

<sup>1410</sup> Somogyvár–Kupavárhegy: *Pl. 14. 11*, in this volume.

<sup>1411</sup> Nagyvejke: *Bóna* (1972) Fig. 2. 2.

<sup>1412</sup> Szombathely–Jáki Road: *Károlyi* (1971–72) Pl. I. 4.

<sup>1413</sup> Illmitz: *Pittioni* (1954) Abb. 122. 2.

<sup>1414</sup> Somogyvár–Kupavárhegy: *Bóna* (1965a) Pl. XI. 7, and *Pl. 7. 3*, in this volume.

<sup>1415</sup> Keszthely–Fenékpuszt: *ibidem* Pl. XIV. 1.

<sup>1416</sup> Pécs–Nagyárpád: *Bándi* (1984a) Taf. XXIX. 1.

#### Type IV/2

Large, wide-mouthed vessel with curved, slightly flaring neck, low rounded shoulders and conical lower part (H. 29 cm). Four small handles were originally set under the rim and two handles span the neckline. The shoulder is decorated with a fluted design.<sup>1417</sup>

### V. Handleless jugs (Fig. 53)

Assigned to this category are the jug-like vessels without a handle appearing in various publications. It is possible that some had originally been provided with a handle, which were not preserved on the surviving vessel fragments. These vessels are rare types, occurring sporadically in the Somogyvár–Vinkovci distribution.

#### Type V/1

The decorated, handleless variant of Type II/7 with elongated, curved neck and squat, conical lower part. It is decorated with a combination of heavily and lightly incised lines and flat knobs.<sup>1418</sup>

#### Type V/2

Biconical vessels with narrow, conical neck can be assigned to this category (H. 14.2 cm and 19 cm). Their form resembles that of handled jugs. Although the pieces found at Börzönce all broke under the rim, the creation of a separate category for these vessels seems wholly justified.<sup>1419</sup> While it is possible that these fragments came from larger handled jugs, there is no trace of a handle stub on the shoulder either.

Bondár quoted parallels to these vessels from Belegiš, Vinkovci and Zemun–Šljunkara.<sup>1420</sup> Although the cited vessels are genuine handled jugs, their constricted conical neck bears some resemblance to the vessel type discussed here.

#### Type V/3

Wide-mouthed, handleless jug with tall, cylindrical neck and squat, conical body. The shoulder is decorated with short triple lines.<sup>1421</sup>

#### Type V/4

Rounded vessel with low, curved neck from Somogyvár. There was no indication of a handle on the surviving fragment (H. 20–22 cm).<sup>1422</sup>

#### Type V/4a

Squat vessel with curved, cylindrical neck and curved shoulder.<sup>1423</sup>

<sup>1417</sup> Szava: *Ecsegy* (1979a) B/2, 101, Taf. IX. 14.

<sup>1418</sup> Pécs–Nagyárpád: *Bóna* (1965a) 44, Pl. XVI. 4; *Bándi* (1984a) Taf. XXIX. 4.

<sup>1419</sup> *Bondár* (1995) 206, 212, Pl. 173. 344, Pl. 174. 353.

<sup>1420</sup> Belegiš–Gradac: *Tasić* (1968) Abb. 13; Vinkovci: *Dimitrijević* (1982a) Abb. 5. 2; Zemun–Šljunkara: *Vranić* (1991) T. III. 2.

<sup>1421</sup> Pécs–Nagyárpád: *Bándi* (1984a) Taf. XXIX. 8.

<sup>1422</sup> Somogyvár–Kupavárhegy: *Pl. 14. 13*, in this volume.

<sup>1423</sup> Györszemere–Tóth tag: *Figler* (1994) Abb. 8. 1.



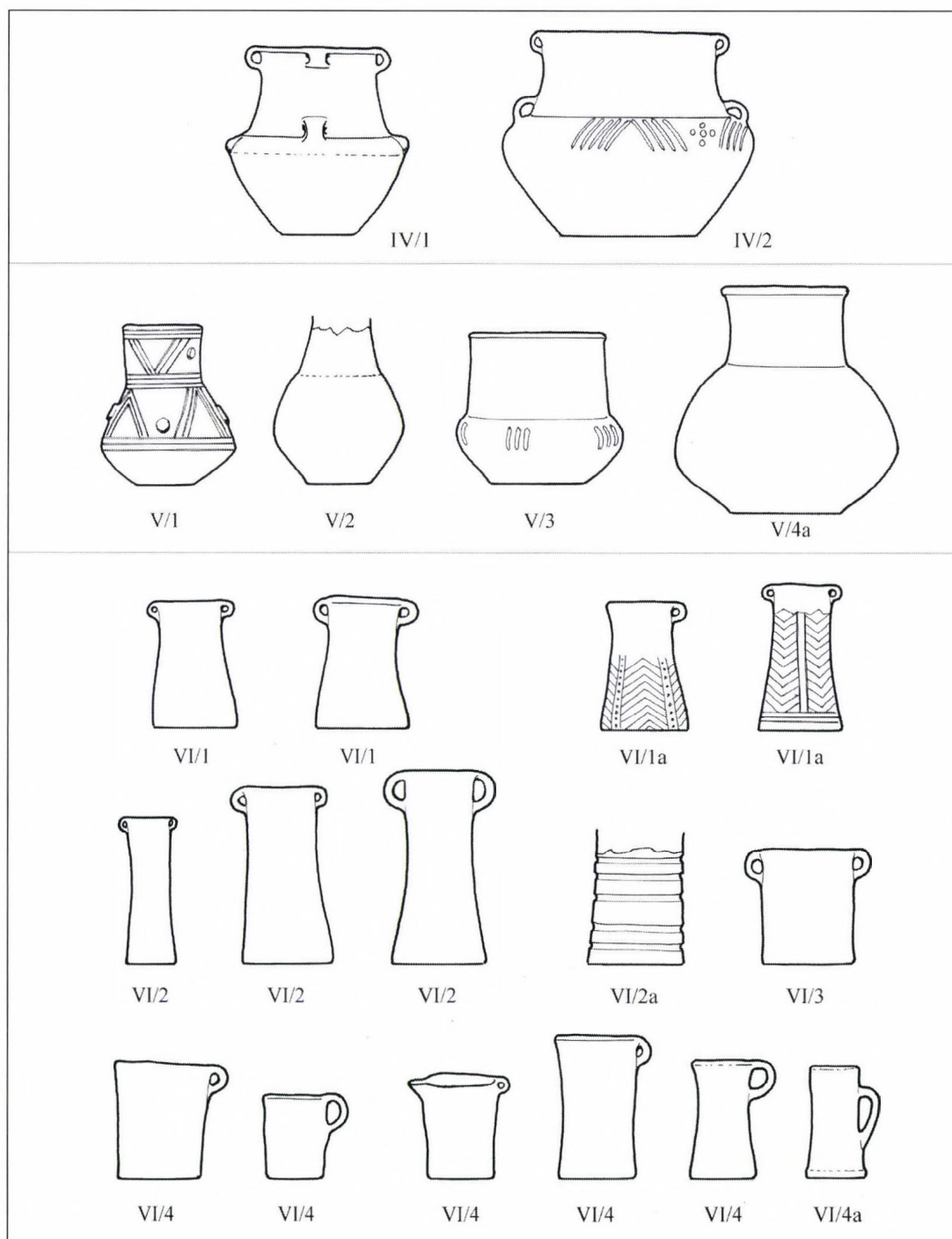


Fig. 53. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia  
Types IV: four-handled vessels, Type V: handleless jugs, Type VI: flasks and cups

Type IV/1: Pécs–Nagyárpád, IV/2: Szava;

Type V/1: Pécs–Nagyárpád, V/2: Börzönce, V/3: Pécs–Nagyárpád, V/4: Győrszemere–Tóth tag;

Type VI/1: Kéthely, Lengyel, VI/1a: Vörs–Battyáni disznólegelő, Zók–Várhegy, VI/2: Börzönce, Csabrendek, Dörgicse–Aszó, Lengyel, Szekszárd, Zók–Várhegy, VI/2a: Pécs–Nagyárpád, VI/3: Pécs–Nagyárpád,

VI/4: Győrszemere–Kutyor, Pécs–Nagyárpád, Kajárpéc–Pokolfaldomb, Schwechat–Brauerei,

VI/4a: Kajárpéc–Pokolfaldomb

H. ca. 7–29 cm

## VI. Flasks and cups (Fig. 53)

Cylindrical flasks are one of the distinctive types of the Somogyvár–Vinkovci culture.<sup>1424</sup> There are few clues regarding its function. It has been suggested that these vessels had been made for a special purpose.<sup>1425</sup> Two-handled flasks with an elongated body (Type VI/2) are more frequent; the more finely made variant with low, curved body (Type VI/1) is less common. Decorated variants (Types VI/1a, VI/2a) have so far only been found in southern Transdanubia.

The lower variant of flasks, which functionally resemble cups (Types VI/3–4) are also assigned here. Most of these are encountered among the grave goods of the mixed Makó–Kosihy–Čaka/Somogyvár–Vinkovci burials of northern Transdanubia, such as Kajárpéc–Pokolfadomb and Schwechat–Brauerei. Very often, only fragments of the flask bases are found and thus the exact type cannot always be determined.<sup>1426</sup>

This vessel type was used over an extensive area and within broad time brackets. One unusual variant of flasks is represented by the two and three-part vessels (flasks) of the classical Vučedol period.<sup>1427</sup> The earliest pieces of the tall variant appear in the Vučedol B2 phase, for example at Vinkovci.<sup>1428</sup> Elongated flasks were used during the Vučedol C period on the Vučedol sites in northern Croatia,<sup>1429</sup> and they apparently went out of use by the ensuing Rudina period. The vessel also appeared on the Ig settlement in Slovenia during the Vučedol B2 period.<sup>1430</sup> The earliest pieces of the lower variant were brought to light at Draganlug near Ciglenik in Slavonia.<sup>1431</sup> Decorated and plain variants are both known from the Hrustovača group in western Bosnia.<sup>1432</sup>

Spreading from the late Vučedol complex, flasks became popular in the Somogyvár–Vinkovci/Ljubljana/Laibach/Glina IV cultures. The finds of the Vinkovci A period from Vinkovci attest to the presence of two-handled elongated flasks and a variant with lug handles,<sup>1433</sup> and its use has also been documented on the Vinkovci sites at Batrovci–Gradina, Ilok and Vrdnik (Fig. 69. 16).<sup>1434</sup> The southernmost site where flasks were found is Ostrikovac in the Morava Valley.<sup>1435</sup> At Ostrovul Corbului flasks were only found in the pottery assemblage assigned to the late Glina IV phase of the Glina–Schneckenberg culture.<sup>1436</sup> The site itself lies much closer to the preceding Vučedol distribution than the Wallachian and Oltenian territories of the Glina III–Schneckenberg complex, explaining the presence of the vessel type.

Flasks have so far been found almost exclusively in the burials of the Makó–Kosihy–Čaka culture;<sup>1437</sup> the single settlement site yielding flask fragments of an indeterminable variant is Sommerein.<sup>1438</sup>

<sup>1424</sup> Bóna (1965a) 48, 55.

<sup>1425</sup> Kalicz-Schreiber–Kalicz (1999) 88.

<sup>1426</sup> E.g. Csepreg–Kavicsbánya: Károlyi (1971–72) Fig. 14. 6, Fig. 15. 3–4.

<sup>1427</sup> E.g. Stari Mikanovci, Sarvaš: Vučedol (1988) cat. nos 47–48.

<sup>1428</sup> Dimitrijević (1977–78) 48, Abb. 7. 2–3. These “Vinkovci type vessels” did not have handles.

<sup>1429</sup> Martinac: *ibidem* Abb. 7. 5; Marković (1981) T. 2. 7, T. 10. 2.

<sup>1430</sup> Korošec–Korošec (1969) T. 1. 7, T. 2. 2, 5.

<sup>1431</sup> For a handleless variant with two perforations under the rim, cp. Dimitrijević (1977–78) 48, Abb. 7. 4.

<sup>1432</sup> Zečovi: *ibidem* 48, Abb. 7. 6–9.

<sup>1433</sup> Dimitrijević (1982a) T. 4. 3–4, T. 6. 6; Tasić (1984) Taf. IV. 15.

<sup>1434</sup> *Ibidem* Taf. II. 4–5, 9.

<sup>1435</sup> *Ibidem* Taf. II. 3.

<sup>1436</sup> Ostrovul Corbului: Roman (1981) Taf. 5. 4.

<sup>1437</sup> Kunpeszér–Sinai-hegy: Horváth (1988) 18–19.

<sup>1438</sup> Ruttkay (1982) Abb. 22–23; *idem* (1995b) Abb. 31. 8–9. Ruttkay (1982) 147, linked these to the early Somogyvár–Vinkovci culture.



Flasks remained in use until the proto-Nagyrév and early Nagyrév period on the tell settlements in the Hungarian Danube Valley as shown by the ceramic inventory from Bölcske–Vörösgyír, Dunaföldvár–Kálvária, Gerjen–Váradpuszta and Sióagárd–Gencs.<sup>1439</sup> The flasks from these sites can be assigned to the two-handled variant with elongated body (Type VI/2). The difference between these flasks and the ones from County Tolna indicate that while the flasks recovered from Somogyvár–Vinkovci settlements have a smoothed matte finish, the vessels of this type dating from the proto-Nagyrév period from sites along the Danube and the Sió can be regarded as part of the proto-Nagyrév inventory, which, together with the handled jugs, are evidence for the close contact with the regional groups of the Somogyvár–Vinkovci culture. Although fragments of a flask have been found on the Budapest–Csepel–Hollandi Road site of the Bell Beaker group settling in the Budapest area, this vessel type was not particularly common in this area.<sup>1440</sup>

#### Type VI/1

Cylindrical flask with outturned rim and curved lower body (H. ca. 10 cm). Two small handles are set on the rim.<sup>1441</sup> One variant from Börzönce has two knobs set opposite each other, with the vessel body perforated beside the knobs.<sup>1442</sup>

#### Type VI/1a

Decorated varieties of Type VI/1 are also known. A flask from Zók–Várhegy has a design made up of a zig-zag pattern set between incised and fluted bundles of lines,<sup>1443</sup> and flasks bearing a similar design of zig-zag patterns interrupted by vertical lines have come to light on other southern Transdanubian sites too.<sup>1444</sup> Complementing the above design is a pattern of punctates set between a pair of incised lines encircling the vessel, as on a flask from Polány (*Pl. 31. 7*). A one-handled variant from Vörs–Battyáni disznólegelő decorated with punctates and zig-zag lines represents a rare type.<sup>1445</sup>

#### Type VI/2

Tall flask with elongated, curved, cylindrical body (H. 17–19 cm). Two small handles are set on the rim.<sup>1446</sup> This taller variant dominated the flasks in the Vinkovci distribution.<sup>1447</sup> The flasks from the proto-Nagyrév settlements can generally be assigned to the tall flask variety with elongated body.

<sup>1439</sup> Bölcske–Vörösgyír: Szabó–Szécsi (1996) 106, Fig. 3. 4; Dunaföldvár–Kálvária: Szabó (1992) Pl. XXXVIII. 12; Gerjen–Váradpuszta: Bóna (1965a) Fig. 1. 4–5; Szabó (1992) Pl. XXXVIII. 9, 11; and *ibidem* 76, Pl. LXVII. 1, Pl. XXXVIII. 13–14, Pl. LXXIII. 1–3; Sióagárd–Gencs: Bóna (1965a) Fig. 1. 2, Pl. XV. 20; Szabó (1992) Pl. LV. 12, Pl. LXXI. 6, Pl. LXXVII. 3; Szekszárd: Bóna (1965a) Fig. 1. 3.

<sup>1440</sup> Kalicz–Schreiber (1975a) Abb. 3. 4; *idem* (1976a) Abb. 9. 1.

<sup>1441</sup> Kéthely: Bóna (1965a) Pl. XIV. 9; Kétújfalu–Szentmihályfa: *ibidem* 44, Pl. XVI. 13; Lengyel: *ibidem* Pl. XV. 19.

<sup>1442</sup> Bondár (1995) Type P/1, Pl. 173. 329, Pl. 180. 329.

<sup>1443</sup> Bóna (1965a) 44, Pl. XVI. 5–6; Ecsedy (1983a) Pl. IV. 1.

<sup>1444</sup> Kéthely: Bóna (1965a) Pl. XIV. 6; Somogyvár–Kupavárhegy: *ibidem* Pl. XI. 5.

<sup>1445</sup> Bondár (1996b) Fig. 15.

<sup>1446</sup> Börzönce: Bondár (1995) Type P/2, Pl. 173. 330; Pécs–Nagyárpád: Bándi (1981) Taf. 1. 4, Taf. 5. 1, 9, Taf. 7. 6; Kétújfalu–Szentmihályfa: Bóna (1965a) 44, Pl. XVI. 12; Polány: *Pl. 31. 8*, in this volume; Somogyvár–Kupavárhegy: *Pl. 9. 2, Pl. 11. 7*, in this volume; Letenye–Szentkeresztomb: *Pl. 38. 1*, in this volume; Nagygörbő–Várhegy: Nováki (1965) Fig. 4. 3, 15; Gyulaj–Banyahegy: Lengyel: Bóna (1965a) Pl. XV. 6; Csabrendek (Somlyóvásárhely): *ibidem* Fig. 1. 9; Dörgicse–Aszó (Alsódörgicse): *ibidem* Pl. XIV. 14; Zók–Várhegy: Vulić–Grbić (1939) Pl. 18. 2; Bóna (1965a) Pl. XVI. 11.

<sup>1447</sup> Ilok: Tasić (1984) Taf. II. 5, 9; Vinkovci: Dimitrijević (1982a) T. 4. 4; Tasić (1984) Taf. IV. 15; Ostrikovac: *ibidem* Taf. II. 3.

Type VI/2a

Base fragment of a flask decorated with horizontal fluting from Pécs–Nagyárpád.<sup>1448</sup>

Type VI/3

Wide-mouthed, two-handled, low, cup-like variant with slightly curved body.<sup>1449</sup>

Type VI/4

Wide-mouthed, one-handled, low, cup-like variant with slightly curved body.<sup>1450</sup> A taller variety is also known.<sup>1451</sup> A rare variant with a spout was published from Pécs–Nagyárpád,<sup>1452</sup> where a thick-walled coarse variant was also found.<sup>1453</sup> The grave pottery of the few burials assigned to the Makó–Kosihy–Čaka culture comprised cups of this type.<sup>1454</sup>

Type VI/4a

One-handled cup-like variant with slightly curved body. The handle is set on the neck (Kajárpéc–Pokolfadomb, Grave 1).<sup>1455</sup>

VII. Bowls (Figs 54–56)

Bowls comprise vessels of the most varied sizes and quality, and each main type comes in several varieties. Their height ranges between 3 and 20 cm, although much higher and deeper vessels of this type are also known. For example, the bowls from Szava include several 27–30 cm tall pieces.

Different modes of surface treatment can be noted among the culture's bowls: fine, carefully smoothed vessels occur alongside coarse pieces onto which smeared barbotine was applied. Occasionally, a fine and coarse variant of the same type can be distinguished. A finger impressed cordon sometimes encircles the shoulder, as on the pieces from Börzönce (Type VII/6). Fluted decoration appears on bowls as well as on jugs and mugs in the southern and south-eastern distribution, for example at Szava and Somogyvár–Kupavárhegy. Bowls decorated with a zig-zagging cordon have so far only been found at Somogyvár–Kupavárhegy (Type VII/15b: *Pl. 17. 2*).

*Conical bowls with slightly thickened rim and low cylindrical neck (Types VII/1–6; Fig. 54)*

Bowls of this type can mostly be found in the ceramic inventory from settlements. Deeper and flatter variants can be distinguished, as well as handled and handleless ones.

Type VII/1

Conical bowl with slightly outturned rim and low, curved neck. Two knobs are set opposite each other on the shoulder.<sup>1456</sup>

<sup>1448</sup> Bándi (1981) Taf. 1. 8.

<sup>1449</sup> Pécs–Nagyárpád: Bóna (1965a) 44, Pl. XVI. 3; Bándi (1984a) Taf. XXXa. 3.

<sup>1450</sup> Pécs–Nagyárpád: Bándi (1973) Pl. III; *idem* (1981) Taf. 5. 7; *idem* (1984a) Taf. XXXa. 7.

<sup>1451</sup> Pécs–Nagyárpád: Bándi (1979) 65, Fig. 2; *idem* (1984a) Taf. XXXa. 6; Györszemere–Kutyor: Bóna (1965a) Pl. XII. 3.

<sup>1452</sup> Bándi (1984a) Taf. XXXa. 4.

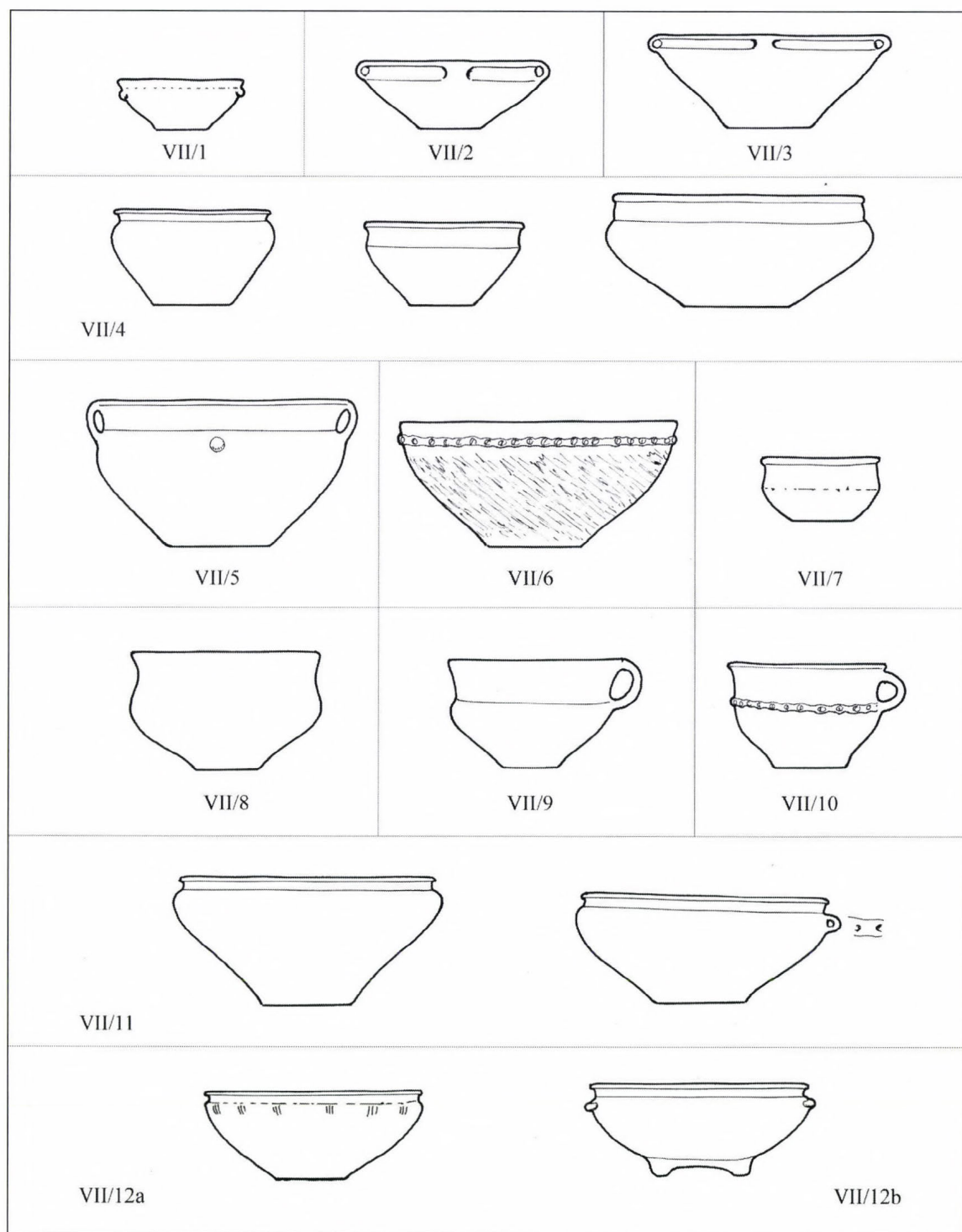
<sup>1453</sup> *Ibidem* Taf. XXXa. 5.

<sup>1454</sup> Kajárpéc–Pokolfadomb, Grave 1: Figler (1994), Abb. 10. 2–4, 7; Kajárpéc–Pokolfadomb, Grave 3: Figler (1996a) Pl. III. 2–3, 5–8; Schwechat–Brauerei: Ruttkay (1995a) Abb. 2. 1, 3.

<sup>1455</sup> Figler (1994) Abb. 10. 6.

<sup>1456</sup> Börzönce: Bondár (1995) Type T/4, Pl. 174. 351.





*Fig. 54. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*  
Types VII/1–12: bowls

Type VII/1: Börzönce, VII/2: Börzönce, VII/3 Börzönce, VII/4: Borosgyőr–Szilfa, Börzönce, Győrszemere–Tóth tag, VII/5: Szava, VII/6: Börzönce, VII/7: Lengyel, VII/8: Lengyel, VII/9: Neusiedl am See, VII/10: Neusiedl am See, VII/11: Nagykanizsa–Inkey kápolna, Börzönce, VII/12a–b: Pécs–Nagyárpád  
H. ca. 6–28 cm

#### Type VII/2

Conical bowl with slightly outturned rim and low, curved neck. Variants with two<sup>1457</sup> and four handles<sup>1458</sup> are known from Börzönce.

#### Type VII/3

Four-handled conical bowl with slightly outturned rim and low, curved neck. A flatter and a deeper variant can be distinguished.<sup>1459</sup> Some of the deeper handled bowls from Szava can be assigned to the deeper variant of this type (H. 14 cm).<sup>1460</sup>

#### Type VII/4

Conical bowl with thickened rim, occasionally with a slightly flaring neck. A flatter and a steep-sided variant can be distinguished.<sup>1461</sup>

#### Type VII/5

Deep conical bowl with slightly outturned rim, curved neck and rounded shoulder (H. 16–28 cm). Flat knobs are set on the shoulder. A possibly handled variant is known from Szava.<sup>1462</sup>

#### Type VII/6

Large conical bowl with straight rim and low, curved neck (H. 22 cm). A specimen from Börzönce is decorated with a finger-impressed cordon encircling the shoulder, underneath which the surface is rusticated.<sup>1463</sup> A bowl from Pit b of the Lánycsók settlement has finger impressions on the thickened rim and a finger impressed cordon interrupted by knobs around the shoulder.<sup>1464</sup>

#### *Conical bowls with slightly flaring neck (Types VII/7–10; Fig. 54)*

These bowls are fairly rare types. Reconstructable pieces are known from the Lengyel settlement and the burials around Lake Fertő. Four main types can be distinguished.

#### Type VII/7

Wide-mouthed, low, conical bowl with cylindrical neck found at Lengyel.<sup>1465</sup>

#### Type VII/8

Wide-mouthed, conical bowl with curved neck and rounded shoulder found at Lengyel.<sup>1466</sup>

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<sup>1457</sup> Bondár (1995) Type T/8a, Pl. 175. 365.

<sup>1458</sup> *Ibidem* Type T/8b, Pl. 175. 366.

<sup>1459</sup> Börzönce: *ibidem* Type T/5, Pl. 174. 352, Pl. 175. 373 (a deeper variant).

<sup>1460</sup> Szava: *Ecsegy* (1979a) Taf. X. 12.

<sup>1461</sup> Borsosgyőr–Szilfa: *Ilon* (1995) Pl. III. 4; Börzönce: Bondár (1995) Type T/2, Pl. 174. 350; Győrszemere–Tóth tag: *Figler* (1996a) Abb. 8. 8.

<sup>1462</sup> *Ecsegy* (1979a) Taf. VIII. 5.

<sup>1463</sup> Bondár (1995) Type T/1a, Pl. 174. 355.

<sup>1464</sup> *Ecsegy* (1980) Taf. VII. 7.

<sup>1465</sup> Bóna (1965a) Pl. XV. 10.

<sup>1466</sup> *Ibidem* Pl. XV. 12.



#### Type VII/9

Wide-mouthed, handled conical bowl with curved, flaring neck from Neusiedl am See (H. 9 cm).<sup>1467</sup>

#### Type VII/10

Wide-mouthed, handled, deep conical bowl with curved, flaring neck, decorated with a finger-impressed cord around the shoulder found at Neusiedl am See (H. 16.6 cm).<sup>1468</sup>

#### Type VII/11 (Fig. 54)

Conical bowl with thickened rim, low, indrawn neck and low, prominent shoulder. A deeper and a shallower variant can be distinguished. Some bowls of this type have a longish stringhole lug on the shoulder,<sup>1469</sup> some have a longish lug<sup>1470</sup> or an elongated flat knob.<sup>1471</sup> One rare variant has an angular shoulder and a small strap handle on the shoulder.<sup>1472</sup> A handleless variant is also known.<sup>1473</sup>

#### Type VII/12 (Fig. 54)

Conical bowl with outturned rim and low, indrawn neck. Variants of this rare bowl type have so far only been found on the Pécs–Nagyárpád settlement. This variant has lug handles on the shoulder.<sup>1474</sup>

#### Type VII/12a

Decorated variant of Type VII/12. Bundles of three incised lines adorn the shoulder.<sup>1475</sup>

#### Type VII/12b

An extremely rare variant. The bowl is set on four small knobs and the shoulder is decorated with flat knobs.<sup>1476</sup>

Similar bowls set on higher feet can be found in the pottery of the classical Vučedol period.<sup>1477</sup> It seems likely that the bowl from Pécs–Nagyárpád represents a simplified variant of this form.

#### *Deep conical bowls with strongly outturned rim, low, curved cylindrical neck and conical shoulder (Types VII/13–14; Fig. 55)*

This bowl type shows a concentration in southern Transdanubia. A knob is often set on the shoulder. The bowls of this type from the Szava settlement are generally reconstructed as two-handled vessels.

<sup>1467</sup> Pittioni (1954) Abb. 121. 1. Cp. Ruttkay (2002) 150: Grave 2 (1690–1610 BC, 1640–1520 BC): late Wieselburg/Gáta culture. More recent finds have called into question the type's attribution to the Somogyvár–Vinkovci culture.

<sup>1468</sup> Pittioni (1954) Abb. 121. 1.

<sup>1469</sup> Börzönce: Bondár (1995) Type T/12, Pl. 145. 168, Pl. 155. 224.

<sup>1470</sup> Pécsvárad: Bóna (1965a) Pl. XVI. 16.

<sup>1471</sup> Somogyvár–Kupavárhegy: Pl. 18. 8, in this volume.

<sup>1472</sup> Lengyel: Bóna (1965a) Pl. XV. 3.

<sup>1473</sup> Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 18.

<sup>1474</sup> Bándi (1981) Taf. 4. 1.

<sup>1475</sup> Bándi (1984a) Taf. XXX. 3.

<sup>1476</sup> Bándi (1979) 65, Fig. 6.

<sup>1477</sup> Vučedol: Schmidt (1945) Taf. 40. 1–2.

#### Type VII/13

The plain variant of this bowl type (H. 9–12 cm),<sup>1478</sup> with a two-handled and a handleless variety. The shoulder is occasionally decorated with a small impressed knob or a short rib.

#### Type VII/14

Decorated variant of Type VII/13. The shoulder is ornamented with oblique channelling or incised bundles of lines and flat knobs,<sup>1479</sup> occasionally bearing a row of punctates. The strap handle springs from the rim; on some variants, the handle is replaced by a longish stringhole lug,<sup>1480</sup> sometimes decorated with an incised line and a row of punctates.<sup>1481</sup> A handleless variant is also known.<sup>1482</sup>

The bowls from south-western Transdanubian sites are generally decorated with incised lines rather than fluting. Some bowls bear an incised zig-zag pattern or, more rarely, a line and a cross motif on the shoulder<sup>1483</sup> and have a long flat knob on the carination.<sup>1484</sup> The handled variety is decorated with an incised cross motif on the handle.<sup>1485</sup>

#### Type VII/14a

A variant with a more prominent shoulder came to light at Szava,<sup>1486</sup> while another variant with fluting on the shoulder and combed bundles of lines on the lower half is known from Somogyvár–Kupavárhegy (*Pl. 11. 6*).

#### *Rounded biconical bowls with low cylindrical neck (Types VII/15–18; Fig. 55)*

With the exception of Type VII/15, biconical bowls of this type also appear in the Makó–Kosihy–Čaka culture. Only a few pieces are known from secure Somogyvár–Vinkovci contexts in southern Transdanubia.

#### Type VII/15

Rounded biconical bowl with strongly outturned rim and low, indrawn neck.<sup>1487</sup> Some pieces are decorated with a small flat knob on the shoulder, such as a specimen from Somogyvár–Kupavárhegy (*Pl. 24. 1*). One variant is represented by another bowl with rounded shoulder on which the neckline is accentuated with an incised line, also from Somogyvár–Kupavárhegy (*Pl. 19. 2*). A handled variant has been published from Csepreg.<sup>1488</sup>

<sup>1478</sup> Lengyel: *Bóna* (1965a) Pl. XV. 1; Somogyvár–Kupavárhegy: *Pl. 13. 8, 10*, in this volume; Szava: *Ecsedy* (1979a) Taf. II. 10, Taf. VI. 3, Taf. X. 1, 8, 10; Pécs–Nagyárpád: *Bándi* (1984a) Taf. XXX. 2.

<sup>1479</sup> Pécs–Nagyárpád: *Bándi* (1979) 65, Fig. 5; *idem* (1981) Taf. 7. 2, Taf. 10. 12; *idem* (1984a) Taf. XXX. 1; Somogyvár–Kupavárhegy: *Pl. 16. 1*, in this volume; Szava: *Ecsedy* (1979a) Taf. II. 8, 11, Taf. IV. 1–2, 4, Taf. V. 4–7, Taf. VII. 2, 5, Taf. X. 3–6, 9, 11, Taf. XII. 2.

<sup>1480</sup> Somogyvár–Kupavárhegy: *Pl. 11. 5*, in this volume.

<sup>1481</sup> Somogyvár–Kupavárhegy: *Pl. 12. 2–3*, in this volume.

<sup>1482</sup> Zók–Várhegy: *Ecsedy* (1983a) Fig. 27.

<sup>1483</sup> Börzönce: *Bondár* (1995) Type T/11, Pl. 180. 427, 428.

<sup>1484</sup> Kaposvár–Keceli-hegy: *Pl. 30. 4*, in this volume.

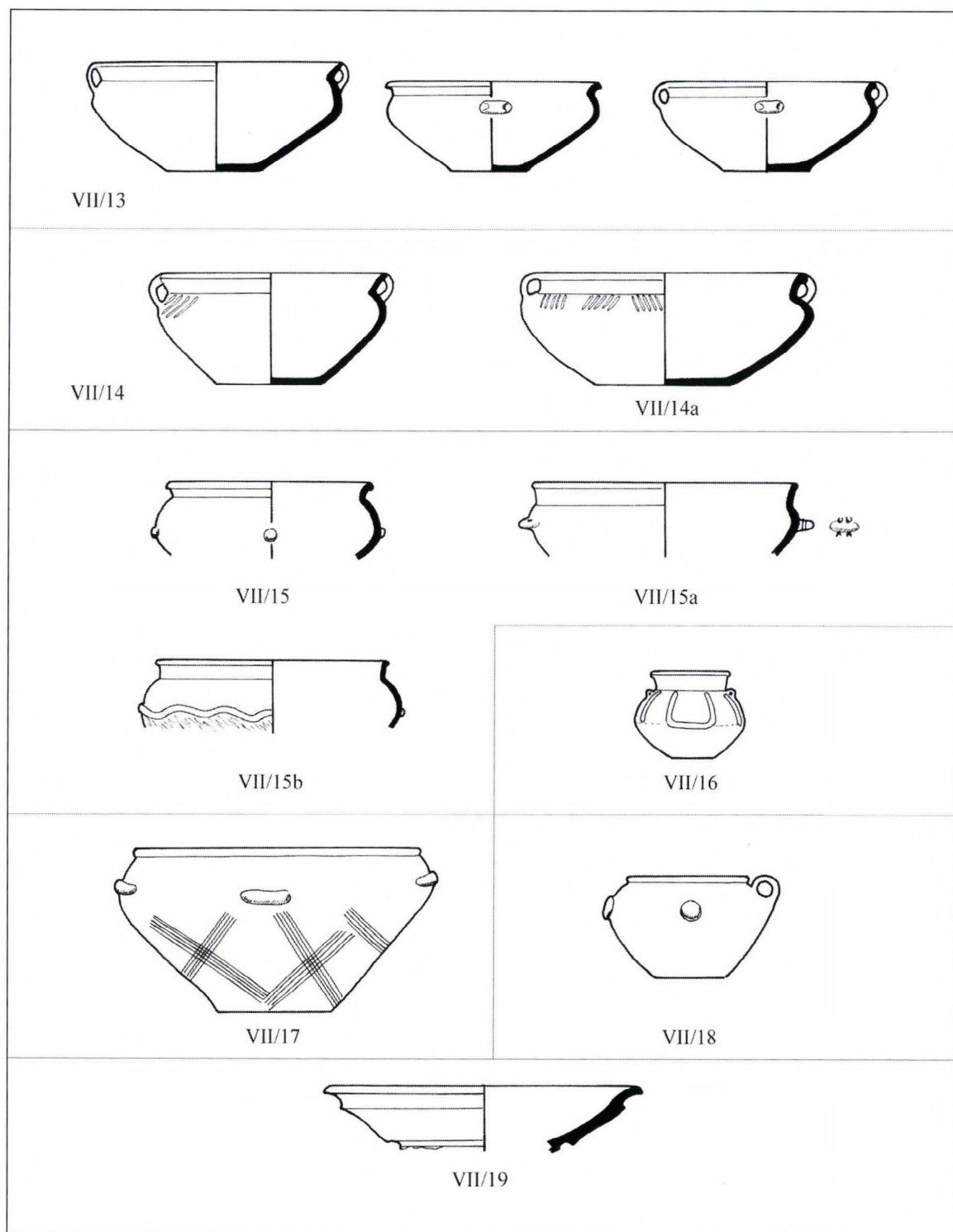
<sup>1485</sup> Csoma: *Pl. 30. 2*, in this volume.

<sup>1486</sup> *Ecsedy* (1979a) Taf. X. 2, 7.

<sup>1487</sup> Somogyvár–Kupavárhegy: *Pl. 19. 7, Pl. 21. 10, Pl. 24. 9*, in this volume.

<sup>1488</sup> *Károlyi* (1971–72) Fig. 10. 3, Fig. 14. 1.





*Fig. 55. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Types VII/13–19: bowls

Type VII/13: Szava, VII/14–14a: Szava, VII/15: Somogyvár–Kupavárhegy,  
VII/15a: Letenye–Szentkeresztomb, VII/15b: Somogyvár–Kupavárhegy, VII/16: Nagyvejke,  
VII/17: Polány, VII/18: Nagyvejke, VII/19: Somogyvár–Kupavárhegy

H. 6–24 cm

#### Type VII/15a

A bowl from Letenye–Szentkeresztomb has a flat, vertically set lug handle on the shoulder instead of a rib (*Pl. 37. 5*).

#### Type VII/15b

A variant from the Somogyvár–Kupavárhegy settlement is decorated with a wavy cordon around the shoulder (*Pl. 17. 2*). The surface is smoothed above the cordon and rusticated underneath it. Cordon decoration of this type is more typical for larger storage jars and rather infrequent on bowls.

#### Type VII/16

Small biconical bowl with constricted neck (H. 6 cm). The stringhole lugs set on the shoulder enabled the vessel to be suspended. The shoulder and the carination are decorated with ribs. The single intact bowl of this type is a stray find from Nagyvejke (*Pl. 48. 7*).

#### Type VII/17

Deep biconical bowl with thickened out rim and low, constricted neck. A longish ledge handle is set on the shoulder. A lattice pattern of combed bundles of lines covers the lower part under the shoulder. A larger variant of this bowl type is known from Polány (H. 24 cm: *Pl. 32. 3*). This type is uncommon in the Somogyvár–Vinkovci distribution. A few fragments were found at Somogyvár–Kupavárhegy (*Pl. 8. 5*); one has a small lug handle (*Pl. 9. 6*), another a flat knob on the shoulder (*Pl. 9. 5*). A bowl of this type was found at Nagyvejke too (*Pl. 48. 8*).

The same bowl type appears among the grave goods of Grave 1 from Kajárpéc–Pokolfadomb.<sup>1489</sup> The bowl type essentially represents a type current in the Makó–Kosihy–Čaka culture (cp. MKČ Types VII/19–20).

#### Type VII/18

A narrow-mouthed, small biconical bowl with low, indrawn neck, a stray find from Nagyvejke, represent a rare type (H. 7 cm; *Pl. 48. 6*). A loop handle and a round flat knob are set on the shoulder. Comparable pieces are known from the mixed Makó–Kosihy–Čaka/Somogyvár–Vinkovci burials in northern Transdanubia.<sup>1490</sup>

#### Type VII/19 (*Fig. 55*)

Flat conical bowl with slightly outturned rim and low neck. The type is only known from Somogyvár–Kupavárhegy. The fragments suggest that the base had been fitted separately to the vessel body (*Pl. 16. 11, 13, Pl. 25. 7*).

#### *Bowls with indrawn rim (Types VII/20–24; Fig. 56)*

#### Type VII/20

This bowl type appears to have been popular in the Little Balaton region and western Transdanubia. Four varieties can be distinguished from the published reconstructions: (1) a curved conical bowl<sup>1491</sup> and its

<sup>1489</sup> Figler (1994) Abb. 10. 5.

<sup>1490</sup> Budapest–Aranyhegyi Road: Kalicz–Schreiber (1991) Abb. 3. 1–2; Kajárpéc, Grave 1: Figler (1996a) Abb. 10. 8.

<sup>1491</sup> Vörs–Battyáni disznólegelő: Bondár (1996b) Fig. 13. 1; Letenye–Szentkeresztomb: *Pl. 37. 2*, in this volume.



deeper variant;<sup>1492</sup> (2) a squatter conical variant with a flat knob on the rim<sup>1493</sup> or a flattish lug handle on the shoulder;<sup>1494</sup> (3) a bowl with strongly indrawn rim decorated with a short impressed rib;<sup>1495</sup> and (4) a conical bowl with thickened in oblique rim.<sup>1496</sup>

#### Type VII/21

Conical bowl with indrawn rim. One fragment from Vörs–Battyáni disznólegelő has a rib ornamented strap handle springing from the rim.<sup>1497</sup> This rib decorated handle type is matched by the bowl from Grave 1 of Kajárpéc.<sup>1498</sup> A variant with plain strap handles from Letenye–Szentkeresztomb is decorated with an incised bundle of lines on the shoulder (*Pl. 37. 4*).

#### Type VII/22

Large, deep conical bowl with indrawn rim and conical shoulder. A strap handle is set on the belly. The single vessel of this type comes from the burial uncovered at Keszthely–Lehenrét, in which the ashes had been placed in this bowl.<sup>1499</sup>

#### Type VII/23

Low conical bowl with slightly indrawn rim (H. 6 cm). The small handle springs from the rim; small knobs are set under the rim. The single specimen comes from Lánycsók.<sup>1500</sup>

#### Type VII/24

Conical bowl with slightly indrawn rim (H. 14.5 cm). The handle springs from the rim; small knobs are set under the rim.<sup>1501</sup> The handle is sometimes drawn above the rim and decorated with incised lines.<sup>1502</sup>

### *Miscellaneous small bowls (Types VII/25–29; Fig. 56)*

#### Type VII/25

Small bowl with slightly outturned rim and rounded shoulder (H. 6.8 cm). The knob-ornamented strap handle springs from the rim. A rare type, known only from Lánycsók.<sup>1503</sup>

#### Type VII/26

Small bowl with conical<sup>1504</sup> or slightly rounded body.<sup>1505</sup> A few comparable small plain bowls are known from southern Transdanubia.<sup>1506</sup>

<sup>1492</sup> Letenye–Szentkeresztomb: *Pl. 37. 3*, in this volume.

<sup>1493</sup> Letenye–Szentkeresztomb: *Pl. 36. 2–3*, in this volume.

<sup>1494</sup> Vörs–Battyáni disznólegelő: *Bondár* (1996b) Fig. 14. 2, 4.

<sup>1495</sup> Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 17; Nagykanizsa–Sánc: *Pl. 41. 2–3*, in this volume.

<sup>1496</sup> Csepreg: *Károlyi* (1971–72) Fig. 13. 2, 4, 7.

<sup>1497</sup> *Bondár* (1996b) Fig. 14. 1.

<sup>1498</sup> *Figler* (1996a) Abb. 10. 8.

<sup>1499</sup> MRT 1, Site 21/56, *Pl. 7. 14*.

<sup>1500</sup> *Ecsedy* (1980) *Pl. VIII. 3*.

<sup>1501</sup> Szava: *Ecsedy* (1979a) C/3, 102, *Taf. V. 2*.

<sup>1502</sup> Vörs–Battyáni disznólegelő: *Bondár* (1996b) Fig. 14. 3.

<sup>1503</sup> *Ecsedy* (1980) *Pl. VIII. 2*.

<sup>1504</sup> Szava: *Ecsedy* (1979a) *Taf. V. 1*.

<sup>1505</sup> Börzönce: *Bondár* (1995) Type T/14, *Pl. 175. 369*.

<sup>1506</sup> Pécs–Nagyárpád: *Bándi* (1984a) *Taf. XXXa. 1–2*; Polány: *Pl. 31. 2*, in this volume; Somogyvár–Kupavárhegy: *Bóna* (1965a) *Pl. XI. 1, 3*, cp. *Pl. 6. 1–2*, in this volume.

Type VII/27

Small conical bowl with slightly outturned rim from Szava. The body is decorated with horizontal fluting.<sup>1507</sup>

Type VII/28

Squat, cylindrical bowl with angular profile. One good parallel to the piece from Györszemere–Tóth tag in north-western Transdanubia<sup>1508</sup> comes from the late Makó–Kosihe–Čaka pottery of Mužla–Čenkov in southern Slovakia.<sup>1509</sup>

Type VII/29. Strainer dish

Bowls with perforated base are rare finds. The fragment of a strainer dish was found at Börzönice and a base fragment from Kemendollár can also be tentatively assigned to this vessel type.<sup>1510</sup>

*VIII. Small lids and small conical bowls (“lamps”) (Fig. 56)*

In her discussion of the ceramic finds from Börzönice, Bondár suggested that variants of small conical bowls without a thickened rim may have been used as lids.<sup>1511</sup> The finds from Börzönice enabled the identification of two main types (Types VIII/1–2).

Similar small conical bowls with wide, oblique rim were tentatively interpreted as oil lamps,<sup>1512</sup> despite the fact that traces of burning or remains of soot could rarely be noted in their interior. The four main types of these small bowls are generally plain (Type VIII/3), although a knob is sometimes set on the rim or the rim is perforated (Types VIII/4–5). The single decorated piece comes from Pécs–Nagyárpád (Type VIII/6).

These bowls enjoyed a wide supra-cultural popularity in Transdanubia and the Carpathian Basin. They can probably be derived from the decorated conical bowls of the Vučedol–Zók culture (cp. MKČ Type VIII).<sup>1513</sup>

*Lids (Types VIII/1–2; Fig. 56)*

Type VIII/1

Conical lid.<sup>1514</sup> A variant with a slightly indented top was found at Börzönice.<sup>1515</sup>

Type VIII/2

Conical lid with perforated lug. The single known piece comes from Börzönice.<sup>1516</sup>

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<sup>1507</sup> *Ecsedy* (1979a) E, 102, Taf. VI. 1.

<sup>1508</sup> Györszemere–Tóth tag: *Figler* (1994) Abb. 8. 11.

<sup>1509</sup> *Kuzma–Hanuliak* (1990) Abb. 4. 5.

<sup>1510</sup> Börzönice: *Bondár* (1995) Type T/13, Pl. 175. 368; Kemendollár: *Nováki* (1960) Fig. 3. 4.

<sup>1511</sup> *Bondár* (1995) Pl. 142. 149, Pl. 181. 433.

<sup>1512</sup> *Ibidem* 209, Pl. 175. 367, 370, Pl. 180. 367.

<sup>1513</sup> E.g. Zók: *Ecsedy* (1983a) Pl. II. 3; Vučedol: *Schmidt* (1945) Taf. 42. 2–3.

<sup>1514</sup> Szava: *Ecsedy* (1979a) Taf. IX. 5.

<sup>1515</sup> Börzönice: *Bondár* (1995) Lids/1, Pl. 142. 149.

<sup>1516</sup> Börzönice: *ibidem* 209, Lids/2, Pl. 181. 433



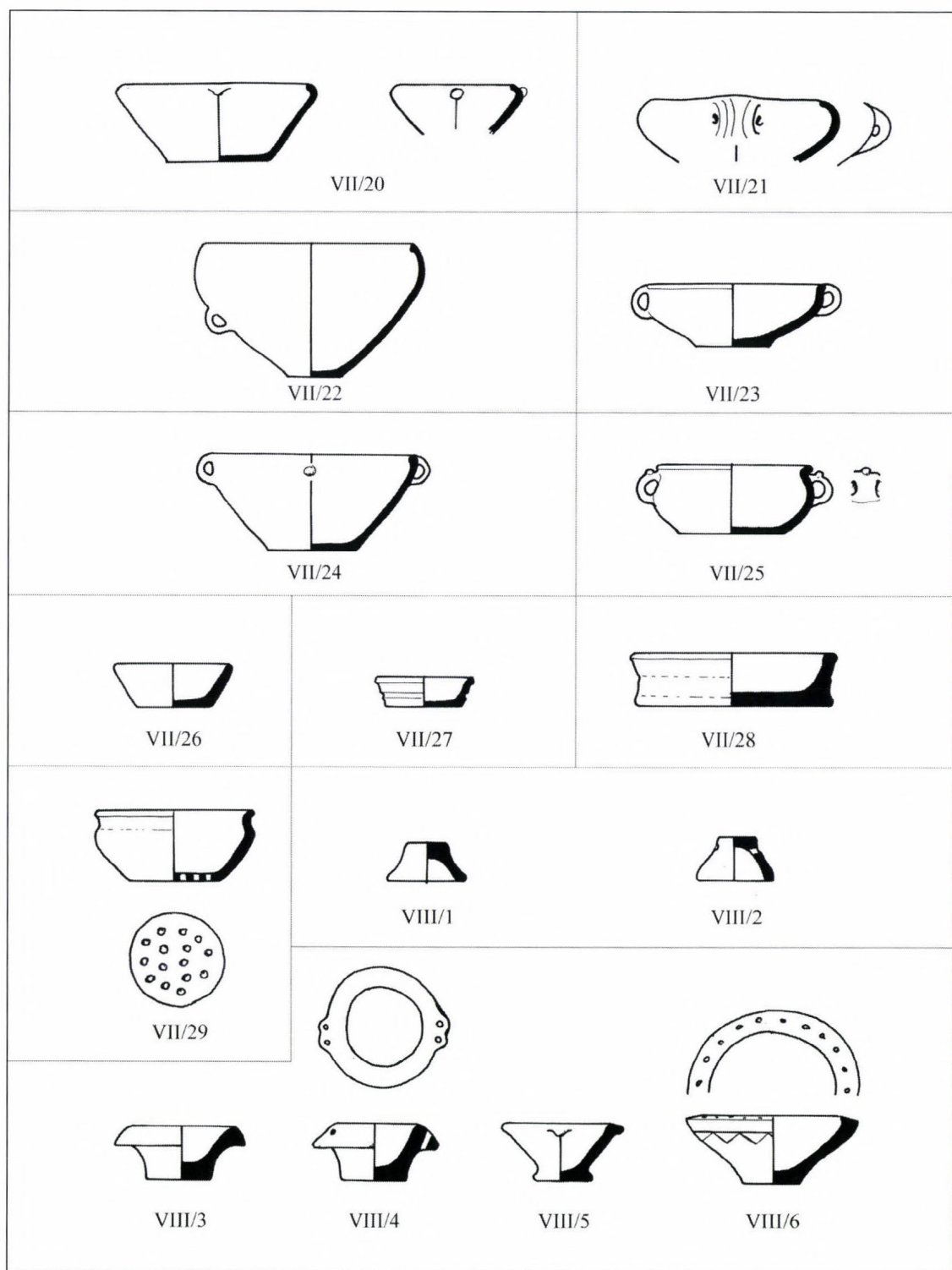


Fig. 56. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia

Types VII/20–29: bowls, Type VIII: small lids and small conical bowls

Type VII/20–21: Vörs–Battyáni disznólegelő, VII/22: Keszthely–Lehenrét, VII/23: Lánycsók, VII/24: Szava, VII/25: Lánycsók, VII/26–27: Szava, VII/28: Györszemere–Tóth tag, VII/29: Börzönce; Type VIII/1–2: Börzönce, VIII/3–4: Börzönce, VIII/5: Polány, VIII/6: Pécs–Nagyárpád

H. 2–16 cm

*Small conical bowls (Types VIII/3–6; Fig. 56)*

Type VIII/3

Conical bowl with wide drooping rim.<sup>1517</sup>

Type VIII/4

Conical bowl with obliquely drooping rim on which there are either two pairs of small perforations opposite each other,<sup>1518</sup> or a small lug handle.<sup>1519</sup>

Type VIII/5

Conical bowl with drooping rim. A small flat knob is set under the rim. A piece from Polány has a ring base (*Pl. 31. 1*). A comparable, but more coarsely made piece from Pécs–Nagyárpád was interpreted as a mould by Ecsedy.<sup>1520</sup> The same site yielded another small bowl of this type.<sup>1521</sup>

Type VIII/6

Small conical bowl with drooping rim decorated with punctates on the rim, and punctates and an incised zig-zag line under the rim. The single known piece was found at Pécs–Nagyárpád.<sup>1522</sup>

*IX. Interior decorated footed bowls (Figs 57–61)<sup>1523</sup>*

Interior decorated footed bowls first appeared in southern and south-eastern Transdanubia on settlements of the late Vučedol period. Fragments of this bowl type have been found on practically all larger settlements.<sup>1524</sup>

No more than a handful of stray finds have been published from the eponymous site at Zók–Várhegy (254; *Fig. 58. 2–5*), the culture's most extensive settlement in southern Transdanubia. According to Ecsedy, interior decorated bowls first appeared during the culture's late phase.<sup>1525</sup> The single professionally excavated bowls come from the Lánycsók–Égettmalom site (123; *Fig. 58. 1*), where an intact and a broken bowl with cross shaped foot and several smaller fragments were found together with late Vučedol pottery in a pit.

In the lack of excavations and finds from secure contexts, the bowl fragments from late Vučedol sites in Transdanubia are assigned to the Vučedol–Zók culture in view of their typological resemblance to the Sarvaš and Laibach type bowls from Slovenia and the Drava–Sava Interfluvium. The finds from Döbrököz–Tüzköves (49; *Pl. 44. 7*), Dunaszekcső–Kálvária-hegy (52), Dunaszekcső–Várhegy (53), Gyulaj–Banyahegy (73; *Pl. 45. 4*), Lánycsók–Égettmalom (123; *Fig. 58. 1*), Zók–Várhegy (254; *Fig. 58. 3, 5*), and the pieces from Somogyvár–Kupavárhegy (198; *Pl. 11. 1*) can be assigned to the Sarvaš type bowls with solid, decorated cross shaped foot. A small bowl with cross shaped foot is known from Dunaszekcső–Várhegy (53).

<sup>1517</sup> Börzönce: *Bondár* (1995) Pl. 175. 370; Somogyvár–Kupavárhegy: *Pl. 11. 13, Pl. 24. 8*, in this volume.

<sup>1518</sup> Börzönce: *Bondár* (1995) Pl. 175. 367, Pl. 180. 367.

<sup>1519</sup> Nagyvejke: *Pl. 48. 4*, in this volume.

<sup>1520</sup> *Ecsedy* (1990) 227, Fig. 10.

<sup>1521</sup> *Bándi* (1981) Taf. 1. 6.

<sup>1522</sup> *Ibidem* Taf. 5. 8.

<sup>1523</sup> Cp. also pp. 121: MKČ Type IX.

<sup>1524</sup> Döbrököz–Tüzköves (49), Dunaszekcső–Kálvária-hegy (52), Dunaszekcső–Várhegy (53), Gyulaj–Banyahegy (73), Lánycsók–Égettmalom (123), Somogyvár–Kupavárhegy (198), Zók–Várhegy (254).

<sup>1525</sup> *Ecsedy* (1979a) 96.



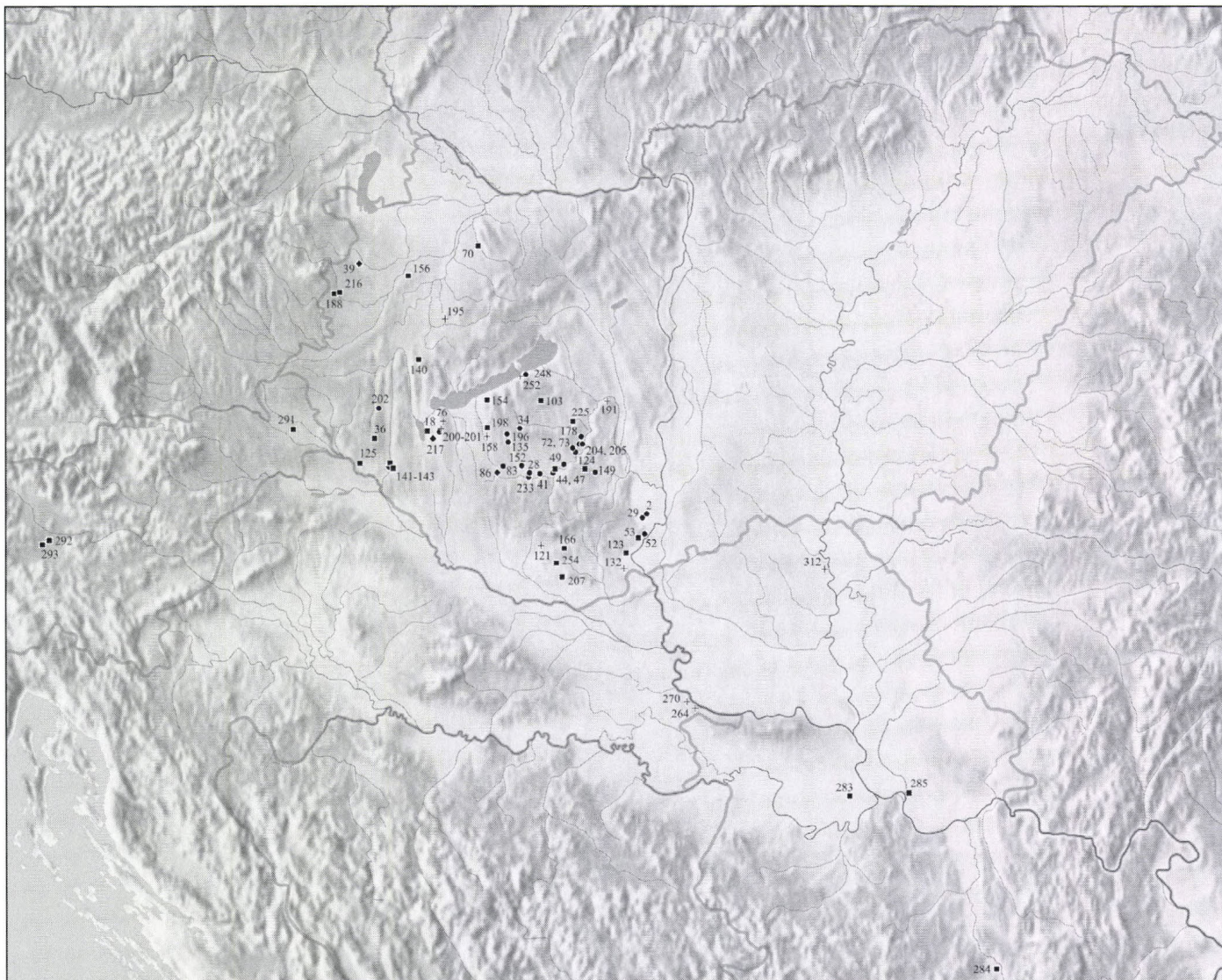
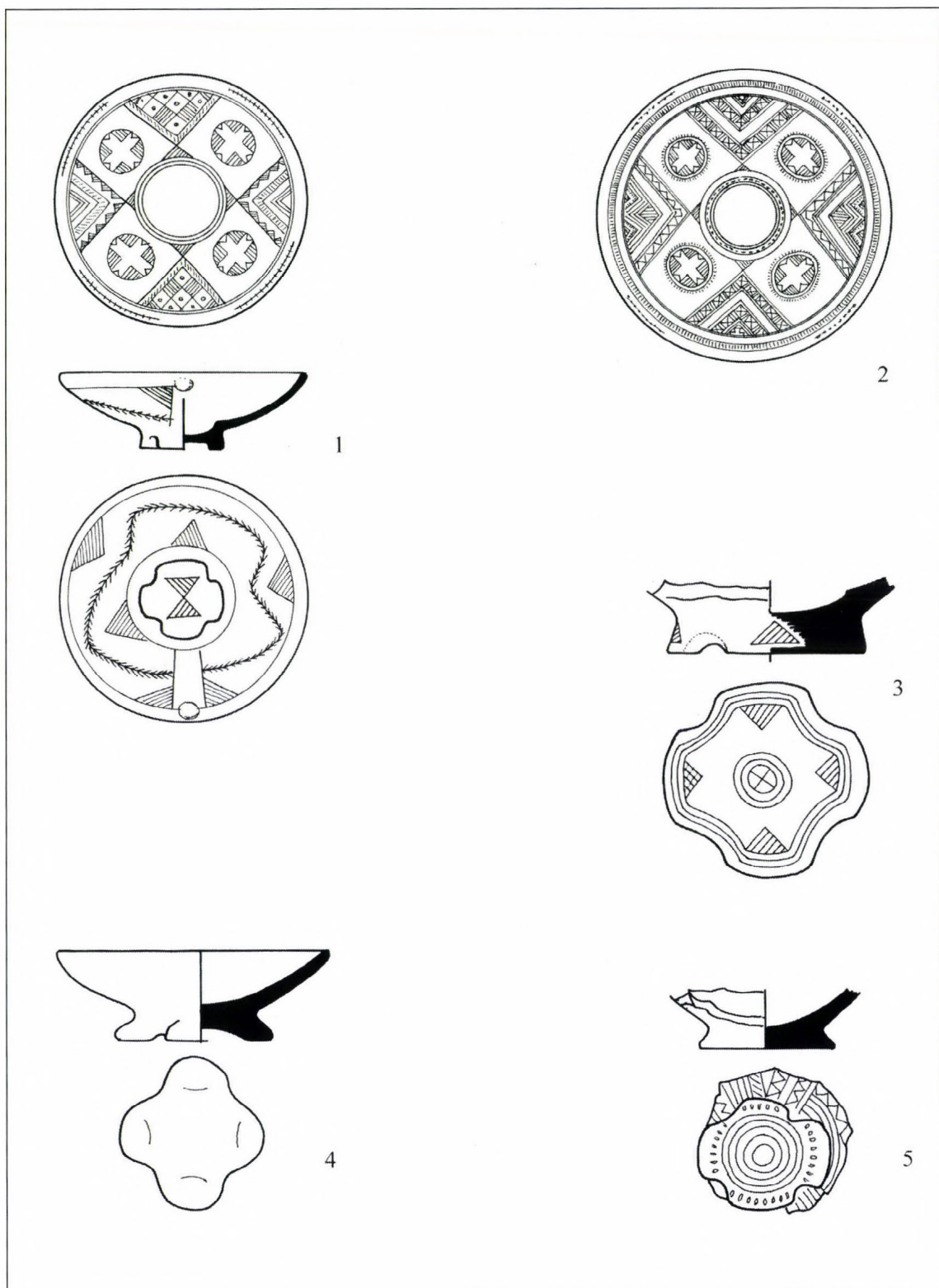


Fig. 57. Distribution of the interior decorated footed bowls of the Somogyvár–Vinkovci culture  
+ stray finds, ● settlement (field survey), ■ settlement (excavation), ◆ settlement and burial, ▲ burial



*Fig. 58. Interior decorated bowls of the late Vučedol culture in Transdanubia*

1. Lánycsók–Égettmalom, 2–5. Zók–Várhegy

H. 4–9 cm



The Vučedol–Zók sites in southern Transdanubian were later occupied by Somogyvár–Vinkovci communities. Finds reflecting the transition between the two cultures have been found on a few of these settlements. Fragments of bowls decorated both on the exterior and interior, such as the pieces from Gyulaj–Banyahegy (73; *Pl. 45. 1, 4–5 and Pl. 46. 1–6*) and Somogyvár–Kupavárhegy (*e. g. Pl. 13. 9, Pl. 15. 1–2, Pl. 27. 1, 4–5, Pl. 28. 1–3*), are perhaps a reflection of this transition. Judging from the finds (including the interior decorated bowls) published from Pécs–Nagyárpád (166), this site can be regarded as one of the earliest settlements of the Somogyvár–Vinkovci culture in southern Transdanubia. The joint occurrence of early Somogyvár–Vinkovci wares and late Vučedol bowls decorated with excised Maltese cross motifs at Sé–Malomi-dűlő (188; *Fig. 60. 14*) suggests that the site was occupied during the late Vučedol/Somogyvár–Vinkovci transition.

Interior decorated bowls have been found on 66 of the currently known 293 Somogyvár–Vinkovci sites (*Fig. 57*). The regional distribution of bowls according to sites is as follows: bowls came to light on about one-quarter of the 254 sites in Transdanubia (58 sites) and on about 8 sites of the 37 sites in Croatia, Slovenia and Serbia. In contrast, this bowl type is not known from either of the two Austrian sites. As regards the cultural groups, which can be linked to the Somogyvár–Vinkovci culture province, the bowl does not occur on sites of the Belotić–Bela Crkva/Žabari–Markovica–Priboj group, although it has been reported from one of the sites Somogyvár–Ada group (Senta [312]). Interior decorated bowls can thus be regarded as a popular ware in this culture complex, which occurs on *ca.* one-quarter (22 per cent) of the sites. Its use appears to have gradually decreased towards the culture's northern, western and southern periphery. The distribution of the bowl type shows some correspondence with the earlier Vučedol/late Vučedol distribution.

Most of the known bowl fragments came to light from contexts suggesting a settlement. Interior decorated bowls have not been recovered from the culture's earlier excavated burials. The fifty-three inurned cremation burials uncovered at Szőkedencs–Cölömpös-árok (217) in 2005 in the southern part of the one-time Little Balaton were genuine sensations in spite of their bad state of preservation and contributed new insights to the culture's less-known burial rites. Undecorated footed bowls and pieces decorated on both the exterior and interior were first found among the grave goods of these burials.<sup>1526</sup> The bowls from Dombóvár (44; *Fig. 59. 1–3, Pl. 42*) represents a rather unusual assemblage: the subsequently reconstructed find circumstances suggest that the three similar interior decorated bowls came to light from the same spot and that their deposition can be interpreted as a form of funerary offering.

The bowls from the culture's Transdanubian distribution were mostly recovered from settlement pits or collected as stray finds (*Fig. 57*). Most were broken; very few intact bowls have been found. It would appear that interior decorated bowls occur on most of the excavated settlements. Their frequency among the pottery finds of a particular settlement is known in the case of two fully published sites: six of the thirty pits uncovered at Börzönce and seven of the nineteen Early Bronze Age pits at Szava yielded fragments of interior decorated bowls. The excavated sites include Lánycsók–Égettmalom, where an interior decorated bowl was recovered from a pit dated to the Vučedol C period, while none were found among the pottery from the settlement features assigned to the Somogyvár–Vinkovci culture.

<sup>1526</sup> Honti–Németh (2007a) 20–22, *Fig. 3*. Bándi mentions a burial from Pécs–Nagyárpád, in which a footed bowl had been deposited: Bándi (1968a) 74, *Anm. 22*. The find is unpublished.

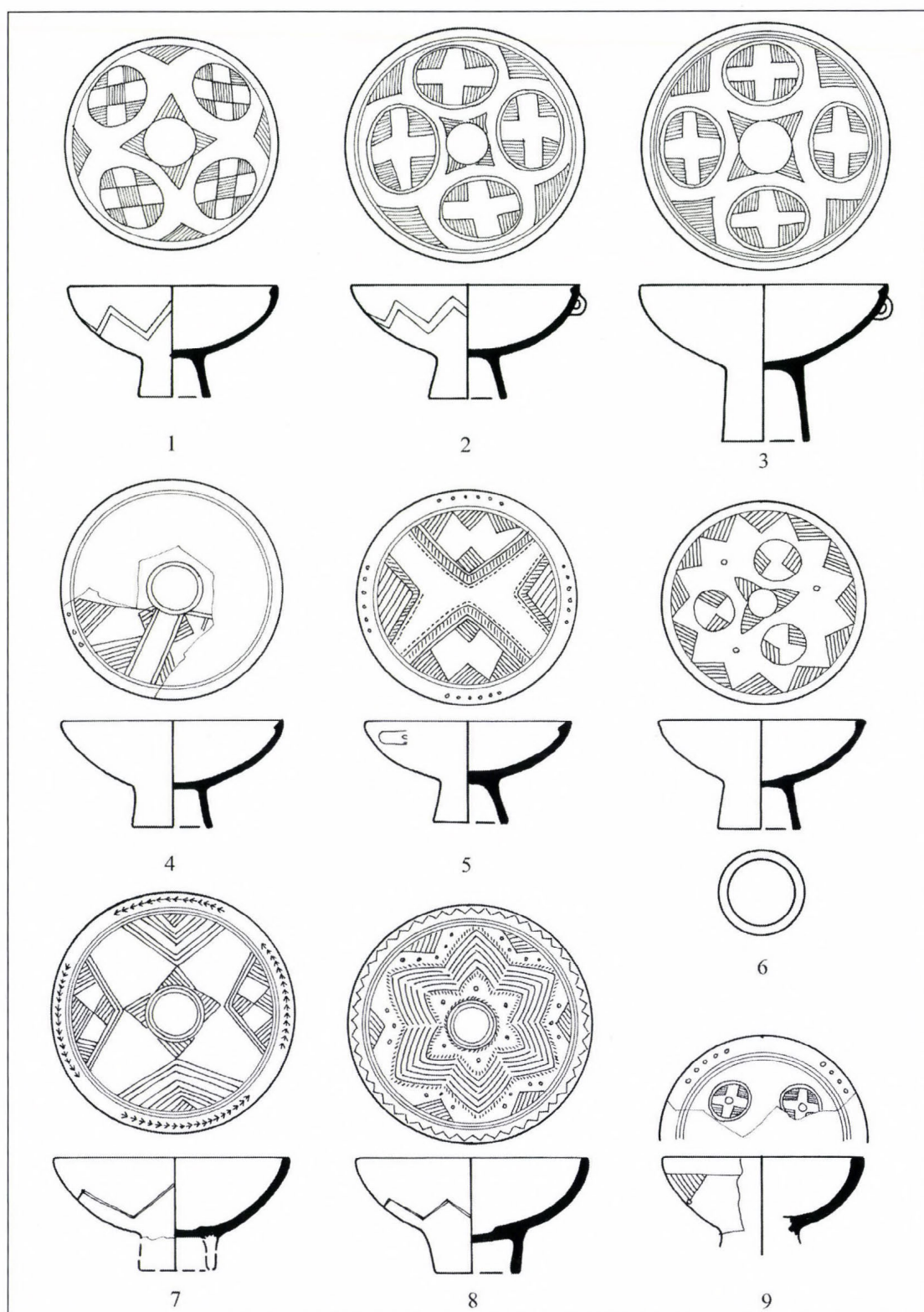


Fig. 59. Vessel types of the Somogyvár-Vinkovci culture in Transdanubia

Type IX: interior decorated footed bowls

1-3. Dombóvár, 4-6. Nagyvejke, 7-9. Kaposújlak-Várdomb

H. 7-17 cm



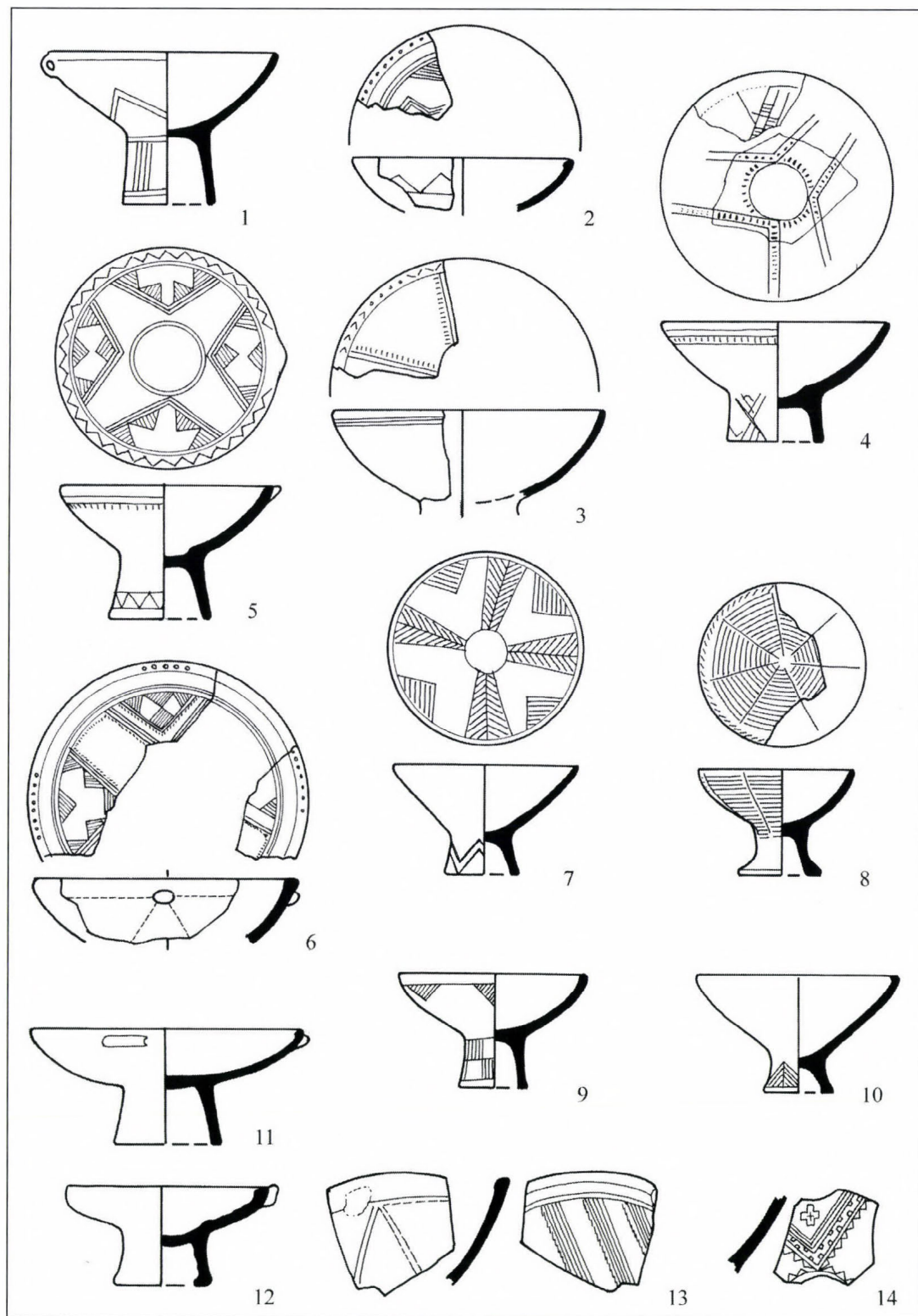


Fig. 60. Vessel types of the Somogyvár–Vinkovci culture  
Type IX: interior decorated footed bowls

1. Zók–Várhegy, 2–3. Nagykanizsa–Inkey kápolna, 4. Krog–Za Raščico, 5. Letenye–Szentkeresztomb,  
6. Börzönce, 7–8. Lengyel, 9–10. Szava, 11–12. Nagyvejke, 13. Gyulaj, 14. Sé–Malomi-dűlő

H. 7–10 cm

Several settlements yielding stray bowl finds are known. The importance of these sites is enhanced by the fact that the stray finds from them include both Vučedol and Somogyvár–Vinkovci pottery.<sup>1527</sup> The bowls from these sites, dating to two different periods, can only be distinguished on typological grounds.

In addition to the above, several other stray fragments are known, most of which came from sites which had probably been settlements.

The dating and typological classification of the bowls from the culture's southern distribution in Croatia, Serbia and Slovenia poses more difficulties in comparison with the pieces from Transdanubia. The reason for this is that most of the interior decorated bowls are stray finds from settlements which had also been occupied during the Vučedol period.<sup>1528</sup> Bowls which can be unambiguously assigned to the Somogyvár–Vinkovci culture dating from the post-Vučedol period are known from a few settlements only.<sup>1529</sup>

In sum, we may say that interior decorated bowls do not figure as prominently in the currently known ceramic inventory of the Somogyvár–Vinkovci culture from the post-Vučedol period as in the Makó–Kosihy–Čaka culture. The number of known bowls and bowl fragments is much lower. The main distribution of bowls which can be unambiguously linked to the Somogyvár–Vinkovci culture falls into the southerly areas of Transdanubia. Interestingly enough, bowls were far less widespread during the post-Vučedol period in the earlier southern Vučedol distribution than in southern Transdanubia. The reason for this can be sought in the similar, interrelated cultural changes in the two regions, which proceeded at a different rhythm. Interior decorated bowls were not part of the new wares introduced by the Somogyvár–Vinkovci complex, but were adopted from the Vučedol population and transformed. This is indirectly confirmed by the fact that bowls of this type do not appear in the pottery of the groups related to the Somogyvár–Vinkovci complex (e.g. the Glina III–Schneckenberg and the southern Belotić–Bela Crkva/Žabari–Markovica–Priboj groups).

### Typology

The placement and style of the decoration, and the form of the foot on intact bowls and the pieces restorable from their fragments<sup>1530</sup> enable the separation of six groups. The bowls from the Transdanubian sites of the Somogyvár–Vinkovci culture were generally decorated:

#### Type IX/1

Bowls decorated in the interior only (*Fig. 59. 3, 6, Fig. 61. 1–3; Pl. 15. 7–8, Pl. 21. 3, Pl. 22. 8, Pl. 30. 1, 3, Pl. 31. 5, Pl. 42. 3–4, Pl. 47. 3*).<sup>1531</sup>

<sup>1527</sup> Döbrököz–Tüzköves (49), Dunaszekcső–Kálvária-hegy (52), Dunaszekcső–Várhegy (53), Gyulaj–Banyahegy (73), Lengyel (124), Nagyvejke–Réti szántók-dűlő (149), Regöly (178), Somogyvár–Kupavárhegy (198).

<sup>1528</sup> E. g. Opatovac (264), Sotin (270), Vinkovci–Tržnica and Hotel (275), Dobanovci–Ciglana (283), Ljubljana–Ig (292).

<sup>1529</sup> E. g. Ostrikovac–Gradina (284), Pančevo–Donja varoš (285), Krog–Za Raščico (291).

<sup>1530</sup> Intact bowls and pieces restorable from their fragments have been found on *ca.* nine Transdanubian sites: Dombóvár 1–3 (44), Kaposújlak–Várdomb (86), Lengyel 1–2 (124), Letenye–Szentkeresztomb (125), Nagyvejke–Réti szántók-dűlő 1–5 (149), Pécs–Nagyárpád 1–2 (166), Szombathely–Körmendi Road (216), Zamárdi–8 Csap Street (248), Zók–Várhegy (254).

<sup>1531</sup> Intact and restorable bowls: a. variant with round, hollow foot: Dombóvár 3 (44/3), Nagyvejke–Réti szántók-dűlő (149), Pécs–Nagyárpád (166), b. variant with rectangular, hollow foot: Zamárdi–8 Csap Street (248); c. variant with round foot and a hollow, cross shaped interior: Szombathely–Körmendi Road (216). Fragments of bowls: Baté (28), Bonnya–Pogánydomb (34), Börzönce–Temetői-dűlő (36), Csepreg–Kavicsbánya (39), Csoma (41), Dunaszekcső–Kálvária-hegy (52), Lengyel (124), Nagyörbő–



#### Type IX/2

Bowls decorated in the interior and on the rim (*Fig. 59. 4–5; Pl. 25. 11, Pl. 47. 2, 4*).<sup>1532</sup>

#### Type IX/3

Bowls decorated on the exterior, the interior and the rim (*Fig. 59. 7–9, Fig. 60. 2–3, 6, 13; Pl. 11. 9, Pl. 15. 1, Pl. 16. 10, Pl. 17. 3, 5, 11, Pl. 20. 3, Pl. 21. 5–6, Pl. 22. 8, Pl. 23. 2–3, Pl. 24. 5, 12, Pl. 25. 2, Pl. 26. 2, 9–10, Pl. 30. 5–6, 10, Pl. 44. 8–10, 13, Pl. 46. 1–2, 4–5*).<sup>1533</sup>

#### Type IX/4

Bowls decorated on the exterior and interior (*Fig. 59. 1–2; Pl. 26. 3–4, Pl. 42. 1–2*).<sup>1534</sup>

#### Type IX/5

Bowls decorated on the exterior, the interior, the rim and the foot (*Fig. 60. 1, 4–5, 7–9, Pl. 36. 1, Pl. 46. 6*).<sup>1535</sup>

#### Type IX/6

The basic form of the bowl is represented by a few undecorated bowls (*Fig. 60. 11–12; Pl. 47. 1*).<sup>1536</sup>

Four main foot types can be distinguished among the interior decorated bowls from Transdanubia:

#### Type IX/A

Interior decorated bowls with round hollow pedestals.

A round, hollow foot seems to be the most widespread in the case of the bowls with interior decoration only and the variant decorated on the exterior, the interior and the rim (*Figs 59–60*).<sup>1537</sup> The appearance of

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Várodttető (139), Nagyvejke–Réti szántók-dűlő (149), Pamuk–Laskapuszta (158), Polány (173) Somogyvár–Kupavárhegy (198).

<sup>1532</sup> Intact and restorable bowls: a. with round, hollow foot: two pieces are known from Nagyvejke–Réti szántók-dűlő (149). Bowl fragments: Börzönce–Temetői-dűlő (36), Csepreg–Kavicsbánya (39), Györszemere–Tóth tag (70), Pécs–Nagyárpád (166).

<sup>1533</sup> This variant appears to be the most widespread one: the body sherds decorated both on the exterior and interior can probably be assigned to this category. Intact bowls: a. with round, hollow foot: Kaposújlak–Várdomb (86), Tamási–Szőlőhegy lába (225). Fragments of this type are known from Börzönce–Temetői-dűlő (36), Döbrököz–Tűzköves (49), Gyulaj–Banyahegy (73), Nagykanizsa–Inkey kápolna (141), Somogyvár–Kupavárhegy (198), Somogyzsitfa (200), Toponár (233).

<sup>1534</sup> Fragments: body sherds from bowls of this type are tentatively assigned to the category with decoration on the rim. Intact bowls: a. with round, hollow foot: Dombóvár (44/1–2).

<sup>1535</sup> Intact bowls: a. with round, hollow foot: pieces with a carelessly drawn design are known from Lengyel (124), Letenye–Szentkeresztomb (125). A comparable fragment has been reported from Szava (207), but no intact pieces have been found at this site. Only the exterior decoration is known in the case of a vessel from Zók–Várhegy (254). A vessel from Lengyel (124/1) must also be mentioned here (*Fig. 60. 8*). The form of the small, chalice shaped vessel and its decoration differs from the currently known bowls of the Somogyvár–Vinkovci culture. A decorated foot fragment is known from Gyulaj–Banyahegy (73).

<sup>1536</sup> Fragments of undecorated bowls: the attribution of these fragments is rather arbitrary. Undecorated intact bowls: a. with a round, hollow foot: Nagyvejke–Réti szántók-dűlő (149), Pécs–Nagyárpád (166).

<sup>1537</sup> Each decoration placement can be found among the intact bowls with a round, hollow foot. Several fragments can also be quoted known from Dunaszekcső–Kálvária-hegy (52), Gyulaj–Banyahegy (73), Hollád (76), Lengyel (124), Pécs–Nagyárpád (166), Polány (173), Simontornya (191), Somlóhegy–Séd-forrás (195), Szava (207), and Somogyvár–Kupavárhegy (198). Pieces decorated on the exterior also occur: a fragment from Regöly (178) bears an incised line, the fragments from Lengyel (124) and Somogyvár–Kupavárhegy

this type can be linked to the more simple ornamental repertoire after the late Vučedol period. Even though it seems likely that bowls with cross shaped foot continuing the Vučedol tradition too were used, very few intact or fragmentary pieces recovered from secure contexts are known.

#### Type IX/B

Interior decorated bowls with a hollow, rectangular foot.

The single piece with a hollow, rectangular foot comes from Zamárdi (248; *Fig. 61. 1*).

#### Type IX/C

Only one example of a round foot with a cross shaped hollow, interior is known from Szombathely (216; *Fig. 61. 3*).

#### Type IX/D

Interior decorated bowls with a low, hollow, cross shaped foot.

The attribution of a bowl variant with a low, hollow, cross shaped foot to the Somogyvár–Vinkovci culture is uncertain because not one single piece has been recovered from a secure context (*Pl. 31. 3*).<sup>1538</sup> In the lack of secure contexts for the finds from Somogyvár–Kupavárhegy (198; *Fig. 61. 4–5, Pl. 26. 5–7*), the tentative attribution of the bowls with hollow and solid cross shaped foot to the Somogyvár–Vinkovci culture is based on typological traits alone (a simple execution and various traits which are uncommon in the Vučedol period). In the lack of intact bowls with cross shaped foot from secure contexts, this variant is not included among the culture's typical forms.

### Decorative technique

The decorative patterns echo the designs of the late Vučedol period. The most frequent motifs in the bowl interior are designs arranged in triangular fields,<sup>1539</sup> a triangle pattern under the rim<sup>1540</sup> and a design of triangles enclosing an empty cross shape enclosed within a circle<sup>1541</sup> (*Fig. 59, Fig. 60. 5–7*). The classical star pattern appeared in the Makó–Kosihy–Čaka distribution; the simplified version of the cross pattern enclosed within a circle can be regarded as a hallmark of Somogyvár–Vinkovci bowls. Triangles filled with oblique hatching flanked by tiny strokes (*Fig. 60. 13*) too can be seen as a typical decorative element of Somogyvár–Vinkovci wares.<sup>1542</sup> The use of bowls decorated on the exterior, the rim and the foot alongside bowls decorated in their interior only is generally explained by Vučedol impacts of a different nature than in the Makó–Kosihy–Čaka culture.

In addition to 7–8.5 cm high bowls,<sup>1543</sup> larger, 13.5 cm high pieces are also known (Dombóvár), as well as unusually tall specimens standing 17–18 cm high (Dombóvár).

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(198) are decorated with impressions arranged in three rows, while a fragment from Pécs–Nagyárpád (166) has a triple zig-zag line.

<sup>1538</sup> A smaller fragment is known from Polány (173), which had presumably been part of an assemblage from a pit.

<sup>1539</sup> Börzönce–Temetői-dűlő (36), Gyulaj–Banyahegy (73), Lengyel (124), Letenye–Szentkeresztdomb (125), Nagyörbő–Várodtető (140), Nagyvejke–Réti szántók-dűlő (149), Szombathely–Körmendi Road (216), Toponár (233), Zamárdi–8 Csap Street (248).

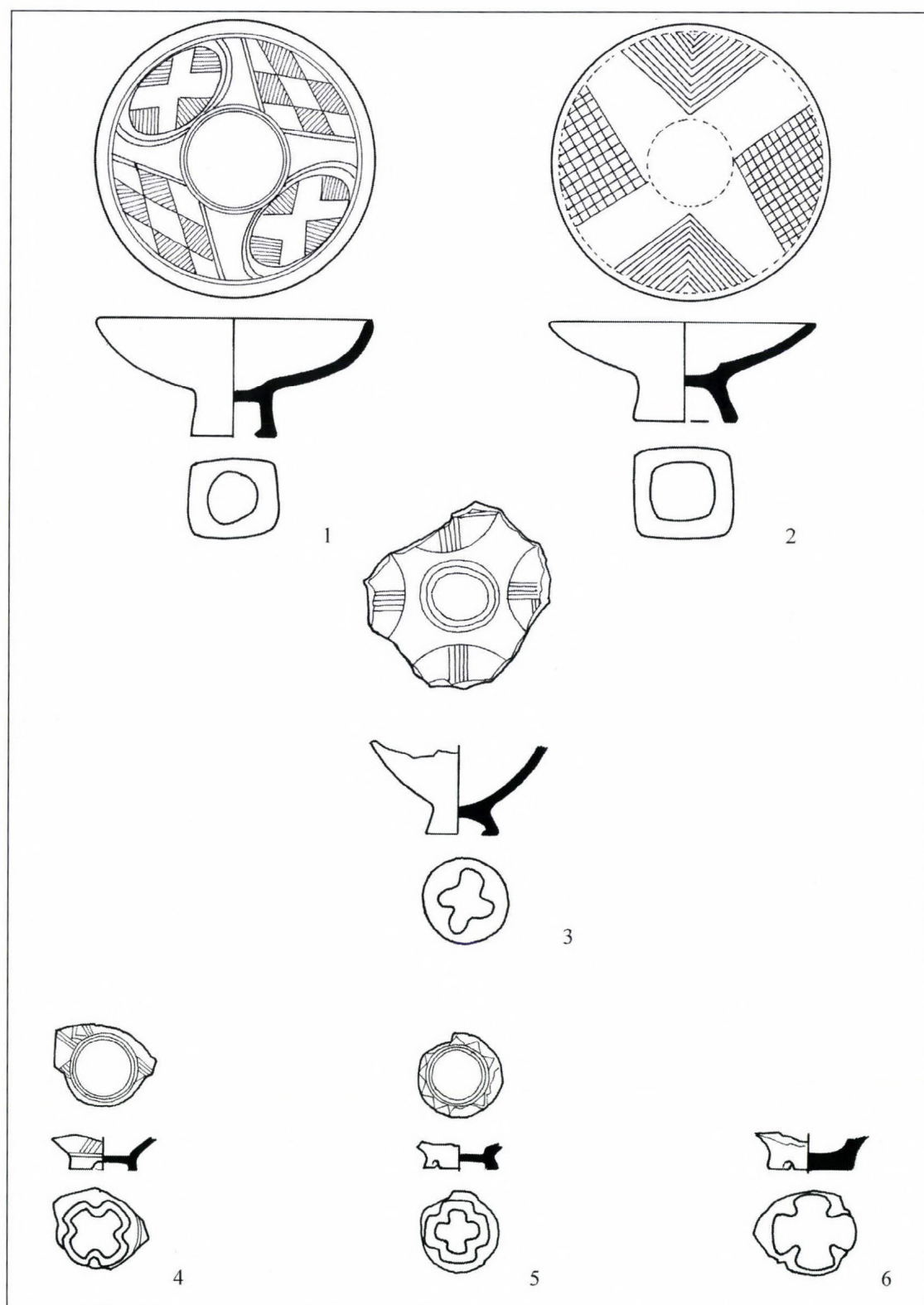
<sup>1540</sup> E.g. Baté (28), Bonnya–Pogánydomb (34), Börzönce–Temetői-dűlő, Pit P (36), Csepreg–Kavicsbánya (39), Csoma (41), Dunaszekcső–Kálvária-hegy (52), Polány (173).

<sup>1541</sup> Dombóvár (44/3), Nagyvejke–Réti szántók-dűlő (149).

<sup>1542</sup> E.g. Somogyvár–Kupavárhegy (198).

<sup>1543</sup> Zamárdi–8 Csap Street (248), Letenye–Szentkeresztdomb (125), Nagyvejke–Réti szántók-dűlő (149/1–5), Szombathely–Körmendi Road (216), Tamási–Szőlőhegy lába (225).





*Fig. 61. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Type IX: interior decorated footed bowls

1. Zamárdi, 2. Senta, 3. Szombathely–Körmenđi Road, 4–6. Somogyvár–Kupavárhegy

H. 7–8.5 cm

The designs on bowls from secure contexts were made using small jabs and incised lines, which were then encrusted with lime. The simpler, rather roughly drawn motifs and the less careful execution compared to the more delicate Vučedol models provides a good anchor for the cultural attribution of the stray finds. Deeply incised, elaborately decorated bowls or their fragments are not known from find assemblages recovered from secure contexts. One case in point regarding stray finds can be quoted from Somogyvár–Kupavárhegy where, in addition to lavishly ornamented late Vučedol pieces, the finds included a few early, rather elaborately decorated Somogyvár fragments, which were gradually succeeded by simpler wares (cp. pp. 243). Unfortunately, this typological sequence cannot yet be confirmed by a chronology based on a stratigraphic sequence. In one case, the interior decoration was sometimes combined with red painting.<sup>1544</sup>

\* \* \*

The most frequent bowl type of the Somogyvár–Vinkovci culture was the variant with interior decoration only set on a round pedestal and the type decorated on the exterior, the interior and the rim. The patterns adorning these bowls echo the rich ornamental repertoire of the late Vučedol period, as shown by the pieces from Gyulaj–Bányahegy, Pécs–Nagyárpád, Sé–Malomi-dűlő, Somogyvár–Kupavárhegy. The patterns gradually become simpler (Szava, Lengyel). One good example is the survival of the circle enclosing a cross formed by the empty area between the triangles (Lánycsók, Zók–Várhegy), one of the hallmarks of late Vučedol bowls, in a more simplified form (Dombóvár, Nagyvejke, Zamárdi). The patterns decorating the bowl interiors resemble the star motifs, the chequerboard patterns and the designs combining empty and patterned fields of the Makó–Kosihy–Čaka culture (which were similarly inspired by the late Vučedol tradition).

The low number of bowls with cross shaped foot which can be securely linked to the Somogyvár–Vinkovci culture is rather striking (Polány, Szombathely). The reason for this is that very few sites occupied during both the late Vučedol and the Somogyvár–Vinkovci period have been investigated and that the few excavated sites are mostly unpublished. Still, the possibility cannot be rejected that the use of these bowls was restricted to the late Vučedol/early Somogyvár period and that they disappeared from southern Transdanubia afterwards. The delicately incised semi-circular pattern on the bowl from Szombathely differs markedly from the common bowl type of the late Vučedol/early Somogyvár–Vinkovci period and reflects cultural impacts from the Laibach complex.<sup>1545</sup>

The use of interior decorated bowls was more widespread in the culture's early phase. There is less evidence for its occurrence in the late phase. This can in part be explained by the fact that most of the professionally excavated sites can be dated to the culture's early period,<sup>1546</sup> although it must be borne in mind that the separation of the early and late phase is tentative at the most.<sup>1547</sup> In the lack of secure stratigraphic sequences, a distinction between the two is based on ceramic typology. Kalicz-

<sup>1544</sup> Red painting was applied to the interior of an intact bowl from Ordacsehi–Kécsimező: *Pásztókai–Szeőke et al.* (2007) 62.

<sup>1545</sup> E.g. at Ig: *Korošec–Korošec* (1969) T. 38. 4, T. 41. 1. Its interior is decorated with a star made up of simple arc motifs, a design used for adorning Makó–Kosihy–Čaka bowls, especially in the westerly areas of the Little Hungarian Plain.

<sup>1546</sup> Börzönce–Temetői-dűlő, Csepreg, Letenye–Szentkeresztomb, Nagykanizsa–Inkey kápolna, Pécs–Nagyárpád, Sé–Malomi-dűlő.

<sup>1547</sup> For arguments in favour of a two-phase sequence, cp. *Ecsedy* (1979a); *Bándi* (1982); *Kalicz-Schreiber* (1982); *idem* (1991); *Kalicz-Schreiber–Kalicz* (1997); *Kulcsár* (2002a). For a different approach, cp. *Bóna* (1992a) 11–16; *Bondár* (1995).



Scheiber and Kalicz have argued that one of the striking differences between the culture's early and late phase is that the use of interior decorated footed bowls declined during the latter.<sup>1548</sup>

There are many uncertainties as regards the internal periodisation of the Somogyvár–Vinkovci culture, its chronology and its distribution relative to the Makó–Kosihy–Čaka culture in Transdanubia and other regions of the Carpathian Basin. One related issue is whether the Makó–Kosihy–Čaka culture was distributed south of Lake Balaton during the Early Bronze Age 1. The reason for the various answers given to this question is the lack of assemblages from secure contexts. This uncertainty is reflected in the differing evaluation of interior decorated bowls. The bowls from County Somogy and the westerly areas of County Tolna are predominantly pieces with a simple decoration and a round pedestal, which can be regarded as typical Somogyvár–Vinkovci pieces. The bowl from Zamárdi (Fig. 61. 1) illustrates the pitfalls of typological analyses. The bowl is decorated in its interior only, a hallmark of the Makó–Kosihy–Čaka culture, and has a rectangular hollow foot of the type typical for Čaka bowls (bowls set on a rectangular hollow foot have not yet been found on Somogyvár–Vinkovci sites). The decoration of semi-circles filled with hatched triangles echoes the designs of the Makó–Kosihy–Čaka culture (e.g. the bowl from Dunaszentpál–Bolgányi Road), while the cross enclosed within a circle can be regarded as a late adoption of similar late Vučedol patterns. These typological traits notwithstanding, the Zamárdi bowl is now assigned to the Somogyvár–Vinkovci culture.

The interior decorated bowls from Transdanubia can be assigned to the Laibach, Čaka, Baranya and Sarvaš types in Burger's typological system, the most comprehensive typology of the Late Copper Age/Early Bronze Age interior decorated bowls from Central and Eastern Europe.<sup>1549</sup> In contrast to Burger's claim, certain cultural and chronological patterns can be noted in the distribution of these bowl types: the Čaka type, for example, occurs exclusively in the Makó–Kosihy–Čaka culture, although variants of the chequerboard pattern arranged in a star motif occur on bowls with a low, round pedestal too. The bowls of the Baranya type, distributed in southern Transdanubia, are often decorated with other motifs in addition to the chequerboard pattern and we can also distinguish a round footed bowl type with decoration on the exterior, the interior and the rim, which can be linked to the southern Transdanubian distribution of the Somogyvár–Vinkovci culture, but cannot be assigned to either the Laibach or the Sarvaš type.

The interior decorated bowls of the Makó–Kosihy–Čaka and the Somogyvár–Vinkovci cultures both continued earlier Vučedol traditions and they can thus be derived from that culture. An Eastern European and a Caucasian origin for these bowls has also been suggested. However, in spite of some striking resemblances, the chronological position of the quoted analogous vessels is uncertain and must therefore be treated with caution.<sup>1550</sup> The same caution must be exercised in the case of the northern Bulgarian parallels<sup>1551</sup> and the probably northern and southern Italian counterparts of these bowls, which probably date from a later period.

Several studies have been devoted to the possible function of these bowls and a ritual use has also been suggested.<sup>1552</sup> The latter is at present merely supported by their ornamentation and their widespread popularity.

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<sup>1548</sup> Kalicz–Schreiber–Kalicz (1997) 327.

<sup>1549</sup> Burger (1980).

<sup>1550</sup> Cp. Kaiser (2003); Kaiser–Nikitenko (2003).

<sup>1551</sup> Nikolova (1999) 199–224.

<sup>1552</sup> Sheratt (1991); Kalicz–Schreiber–Kalicz (1997); Turek (1997).



Pots come in many shapes and sizes, with a wide range of surface finishes. Smaller pots with a height between 9–20 cm and higher pots/storage jars with a height of 24–60 cm can be distinguished based on the size of these vessels.<sup>1553</sup> In terms of function, pots were used for cooking, while the larger storage jars with a greater volume were suitable for storing various foodstuffs. The same diversity can be noted in both size categories, this being the reason that vessel shape was the primary consideration in the typological analysis, within which variants can be distinguished according to function and size.

Two basic modes of surface finish can be noted among the pots. The neck is generally smoothed, while the rest of vessel body is rusticated. This treatment echoes the practice of the late Vučedol period,<sup>1554</sup> and the practice of smoothing the neck and roughening the body can be observed in later cultures of the Early Bronze Age too.

Different rim forms can be distinguished. Rounded rims, outturned, rounded, slightly thickened rims,<sup>1555</sup> finger impressed rims, thickened rims<sup>1556</sup> and folded out rims created by applying an additional layer of clay to the curved, outturned rim.<sup>1557</sup> Folded out thickened rims were often accentuated with finger impressions or impressions made with a circular or semi-circular tool.<sup>1558</sup> Folded out rims with impressions are infrequent in the pottery from Börzönce and more popular on the sites in the Nagykanizsa area. Rims are sometimes decorated with lightly incised lines and small knobs divided by a groove.<sup>1559</sup> Folded out rims accentuated with impressions appear at the Ig settlement of the Laibach culture.<sup>1560</sup>

Strongly outturned thickened rims accentuated with impressions, an infrequent rim form, can mainly be found in the culture's western and northern distribution. This rim type was popular in the Budapest area, the northern Transdanubian, Lower Austrian and Moravian territories of the Makó–Kosihy–Čaka culture.<sup>1561</sup>

Each of the three main rim forms is sometimes complemented by simple or grooved double knobs, set either horizontally or in a slightly drooping position. Drooping lug handles, often triangular in form, can often be encountered on pots.

Pot necks are usually plain and smoothed. Very rarely is a vertical grooved rib set on them.<sup>1562</sup> The neckline is accentuated by a finger impressed rib/cordon or simply a row of finger impressions.<sup>1563</sup>

<sup>1553</sup> Bondár (1995) 202–205.

<sup>1554</sup> For a variant with a roughened surface covered with smeared barbotine from Vučedol, cp. Schmidt (1945) Taf. 30.

<sup>1555</sup> E.g. Letenye–Szentkeresztomb: Pl. 38. 5, in this volume.

<sup>1556</sup> E.g. Somogyvár–Kupavárhegy: Pl. 9. 8, in this volume.

<sup>1557</sup> E.g. Somogyvár–Kupavárhegy: Pl. 8. 10, Pl. 19. 6, Pl. 21. 1–2, in this volume; Letenye–Szentkeresztomb: Pl. 38. 3, in this volume.

<sup>1558</sup> E.g. Somogyvár–Kupavárhegy: Pl. 17. 1, in this volume; Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 14–15; Nagykanizsa–Sánc: Pl. 41. 4–5, in this volume.

<sup>1559</sup> E.g. Somogyvár–Kupavárhegy: Pl. 9. 3, in this volume.

<sup>1560</sup> Korošec–Korošec (1969) T. 66. 1–7.

<sup>1561</sup> Combined with a folded-out rim at Csepreg: Károlyi (1971–72) Fig. 10. 3, Fig. 11.c. 1; Borsosgyőr–Szilfa: Ilon (1995) Pl. III. 7; Győrszemere–Tóth tag: Figler (1994) Abb. 7. 2, 4, Abb. 8. 3, 7.

<sup>1562</sup> E.g. Letenye–Szentkeresztomb: Pl. 38. 4, in this volume; Nagykanizsa–Sánc: Pl. 41. 4, in this volume; Somogyvár–Kupavárhegy: Pl. 16. 6, Pl. 20. 7, in this volume.

<sup>1563</sup> E.g. Somogyvár–Kupavárhegy: Pl. 25. 9, in this volume.



The shoulder is generally decorated with symmetrically set one or two pairs of ribs, or occasionally seven single ribs,<sup>1564</sup> or ribs with two or more grooves.<sup>1565</sup> The vessel shoulder is sometime accentuated with an incised line or, less frequently, with finger impressions or tool-made impressions, or a cordon. Three small flattish knobs<sup>1566</sup> or a pair of flat knobs are sometimes set on the shoulder.

Several techniques were used for roughening the belly, ranging from deeply incised linear patterns to light scoring<sup>1567</sup> and smeared barbotine, the latter created by splashing the vessel with clay paste and finger-smearing it,<sup>1568</sup> or smoothing more carefully for a more pleasing finish.<sup>1569</sup>

Pinched decoration is a surface finish unique to the pots from the Pécs–Nagyárpád, Somogyvár–Kupavárhegy and Kaposújlak–Várdomb settlements. This decoration was created by impressing the vessel surface with an oval implement, resulting either in a series of oval impressions<sup>1570</sup> or linear scoring.<sup>1571</sup> This decoration was mostly applied to one and two-handled pots (Type X/5, Type XI/2). Impressions made with a pointed implement resulted in a similar surface.<sup>1572</sup> Bándi noted that this type of barbotine and “Stichband”-like decoration was a legacy of the cultural substratum of the southern distribution,<sup>1573</sup> explaining why this type of surface treatment was not applied in more northerly regions. Variants of this pinched decoration occur on the one- and two-handled small pots of the Vučedol B2 and Vučedol C period.<sup>1574</sup>

Deeply incised linear motifs and lattice patterns are rare, occurring mostly on small one-handled pots.<sup>1575</sup> Combed bundles of lines forming a lattice pattern can sometimes be found on two-handled pots.<sup>1576</sup>

#### *X. One-handled small pots (Fig. 62)*

Two basic types can be distinguished based on the position of the handle. One type is represented by vessels on which the handle spans the rim and the shoulder (Types X/1–10), the other by pots on which the handle is set on the neckline (Types X/11–14).

Most pots of this type were brought to light on the southern Transdanubian settlements at Börzönce and Pécs–Nagyárpád. It seems likely that the pottery from Szava comprised more one-

<sup>1564</sup> E.g. Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 15; Nagykanizsa–Sánc: Pl. 40. 2, in this volume.

<sup>1565</sup> E.g. Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 14; Nagykanizsa–Sánc: Pl. 40. 3, in this volume.

<sup>1566</sup> E.g. Somogyvár–Kupavárhegy: Pl. 18. 3, in this volume.

<sup>1567</sup> E.g. Somogyvár–Kupavárhegy: Pl. 18. 11–12, in this volume.

<sup>1568</sup> E.g. Somogyvár–Kupavárhegy: Pl. 8. 12, Pl. 21. 7, in this volume; Nagykanizsa–Sánc: Pl. 41. 5, in this volume.

<sup>1569</sup> E.g. Somogyvár–Kupavárhegy: Pl. 18. 9, Pl. 20. 10, in this volume; Nagykanizsa–Sánc: Pl. 41. 4, in this volume.

<sup>1570</sup> Pécs–Nagyárpád: Bándi (1979) 66, Figs 1, 3, 4; *idem* (1981) Taf. 2. 3, 4, 5, 7, Taf. 4. 5, Taf. 5. 4; Somogyvár–Kupavárhegy: Pl. 16. 2, Pl. 18. 4, Pl. 19. 11, Pl. 24. 13, in this volume; Döbrököz–Tűzköves.

<sup>1571</sup> Pécs–Nagyárpád: Bándi (1981) Taf. 2. 6, Taf. 8. 1–2, 7, 11, 12, 15, 16.

<sup>1572</sup> Somogyvár–Kupavárhegy: Pl. 10. 19, Pl. 12. 15, Pl. 14. 8, in this volume.

<sup>1573</sup> Bándi (1980) 83.

<sup>1574</sup> Vinkovci–Hotel: Dimitrijević (1982a) Taf. 2. 2; Ig: Korošec–Korošec (1969) T. 21. 1a, 1b, T. 62. 1–5, 7, T. 63. 7–9, T. 64. 4.

<sup>1575</sup> Pécs–Nagyárpád: Bándi (1979) 66, Fig. 2.

<sup>1576</sup> Keszthely–Fenékpuszta: Bóna (1965a) Pl. XIV. 5.

handled pots and that the reconstruction of several fragments as coming from two-handled vessels may be mistaken.<sup>1577</sup> Most small pots (H. 10–20 cm) can be assigned to this category.

*One-handled pots with the handle springing from the rim (Types X/1–5; Fig. 62)*

Type X/1

Small globular pot with low, slightly curved neck (H. 10–15 cm). The body is smoothed.<sup>1578</sup> A variant with angular shoulder is also known.<sup>1579</sup>

Type X/2

Small pot with low neck, rounded shoulder and conical lower half. A small knob is set on the shoulder opposite the handle. The body of this pot type, currently only known from Börzönce, is slightly flattened and angular.<sup>1580</sup>

Type X/3

Small pot with curved thickened rim and low, cylindrical neck. The neckline is accentuated with a row of impressed dots. The vessel's lower part is rusticated.<sup>1581</sup>

Type X/4

Small pot with slightly thickened rim, low neck and elongated body. The neckline is accentuated with an incised line. Three finger-impressed double knobs are set symmetrically on the shoulder. The vessel's lower part is rusticated.<sup>1582</sup>

Type X/5

Pot with thickened rim, low neck and elongated body. The neckline is accentuated with an incised line. Three finger-impressed knobs are set symmetrically on the shoulder. The vessel's lower part is rusticated.<sup>1583</sup> A variant of this type with cylindrical neck and rounded body is covered with pinched decoration.<sup>1584</sup>

*Rare forms (Types X/6–10; Fig. 62)*

Type X/6

Pot with low neck and angular shoulder. The handle springs from the rim to under the shoulder. The vessel's lower part is rusticated.<sup>1585</sup>

<sup>1577</sup> E.g. *Ecsedy* (1979a) Taf. VII. 7, Taf. IX. 3.

<sup>1578</sup> Börzönce: *Bondár* (1995) 204, Type EF/1, Pl. 175. 376 (H. 14 cm); Vörs–Battyáni disznólegelő: *Bondár* (1996b) Fig. 12. 1.

<sup>1579</sup> Pécs–Nagyárpád: *Bándi* (1984a) Taf. XXX. 7; Somogyvár–Kupavárhegy: Pl. 24. 6, Pl. 10. 10, in this volume.

<sup>1580</sup> *Bondár* (1995) Type EF/2, Pl. 175. 375.

<sup>1581</sup> *Ibidem* Type EF/3, Pl. 140. 125.

<sup>1582</sup> *Ibidem* Type EF/4, Pl. 175. 377.

<sup>1583</sup> Börzönce: *ibidem* Type EF/5, Pl. 175. 380, 383.

<sup>1584</sup> Pécs–Nagyárpád: *Bándi* (1979) 66, Figs 1, 3.

<sup>1585</sup> *Bondár* (1995) Type EF/6, Pl. 174. 357.



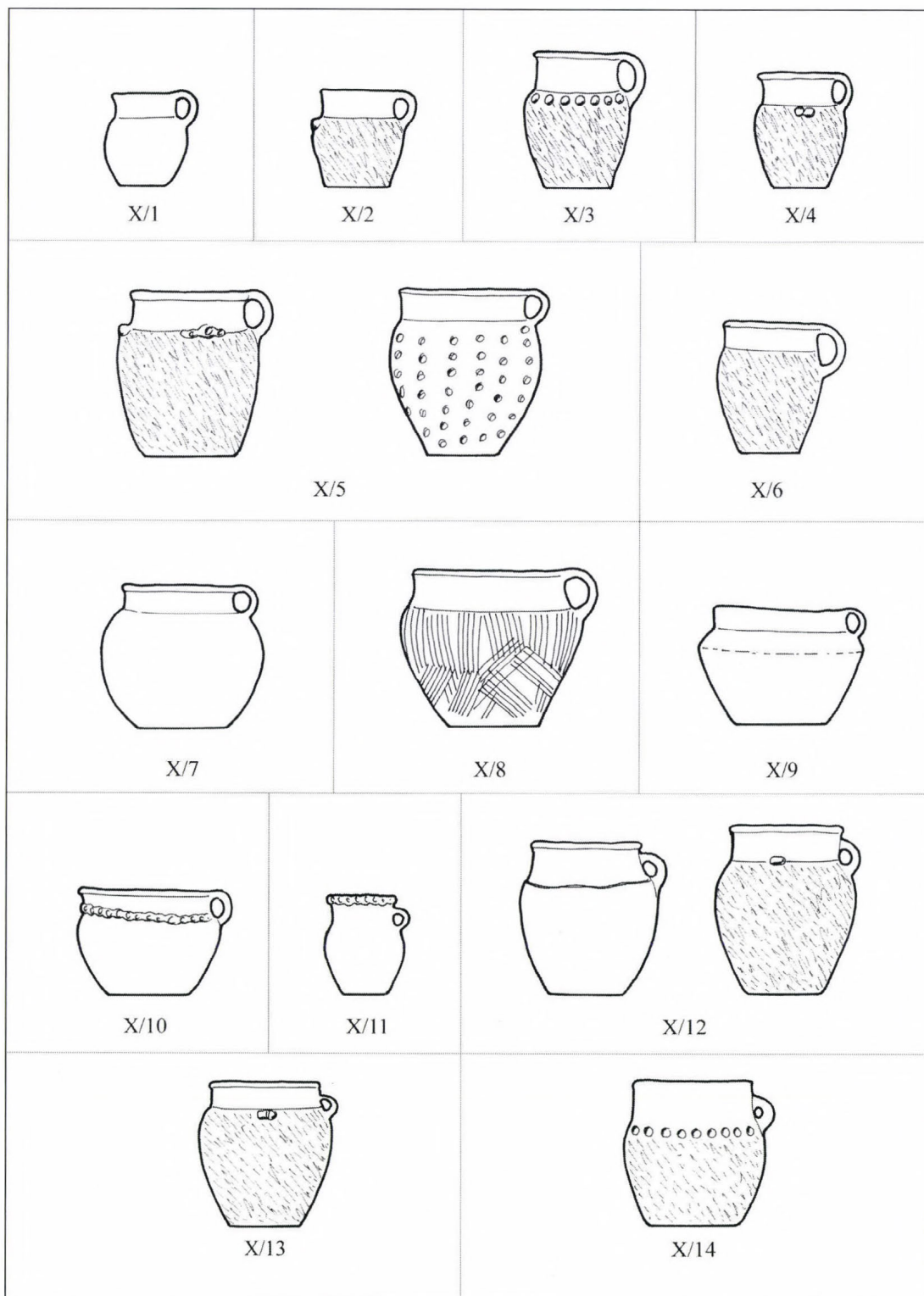


Fig. 62. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia  
Type X: one-handled pots

Type X/1: Vörs–Battyáni disznólegelő, X/2–4: Börzönce, X/5: Börzönce, Pécs–Nagyárpád, X/6: Börzönce,  
X/7: Szava, X/8–10: Pécs–Nagyárpád, X/11: Börzönce, X/12–14: Pécs–Nagyárpád  
H. 10–20 cm

Type X/7

Tall one-handled pot with folded out rim, low, curved neck and rounded body (H. 20.4 cm).<sup>1586</sup>

Type X/8

Wide-mouthed pot with cylindrical neck and rounded shoulder. The body is decorated with a deeply incised linear pattern.<sup>1587</sup>

Type X/9

Wide-mouthed one-handled pot with low, slightly flaring neck, conical shoulder and conical lower part.<sup>1588</sup>

Type X/10

Small one-handled pot with low, flaring neck, conical shoulder and conical body. The neck is encircled by a finger impressed cordon.<sup>1589</sup>

*One-handled pots with the handle set under the rim (Types X/11–14; Fig. 62)*

Type X/11

Small pot with low neck. The rim is decorated with finger impressions. The handle springs from under the rim to the shoulder.<sup>1590</sup>

Type X/12

Pot with curved cylindrical neck and rounded shoulder. The handle spans the neck and the shoulder. A flattish single or double knob is set on the shoulder. The vessel body is sometimes rusticated.<sup>1591</sup>

Type X/13

Pot with curved cylindrical neck and elongated body. The handle spans the neck and the shoulder. A flattish single or double knob is set on the shoulder. The vessel body is rusticated.<sup>1592</sup>

Type X/14

Wide-mouthed, squat pot with curved cylindrical neck. The handle spans the neck and the shoulder. A row of finger impressions encircles the shoulder. The vessel body is rusticated.<sup>1593</sup>

*XI. Two-handled pots (Fig. 63)*

Similarly to one-handled pots, two main types can be distinguished, based on the position of the handles. One type has the handles spanning the rim and the shoulder (Type XI/1), the other has the handles springing from the neck to the shoulder (Types XI/2–5).

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<sup>1586</sup> Szava: *Ecsedy* (1979a) Taf. XI. 5.

<sup>1587</sup> Pécs–Nagyárpád: *Bándi* (1979) 66, Fig. 2.

<sup>1588</sup> *Bándi* (1984a) Taf. XXX. 5.

<sup>1589</sup> *Ibidem* Taf. XXX. 6.

<sup>1590</sup> Börzönce: *Bondár* (1995) Type EF/7, Pl. 137. 103, Pl. 140. 127, Pl. 146. 176.

<sup>1591</sup> Pécs–Nagyárpád: *Bándi* (1981) Taf. 5. 2, Taf. 7. 3.

<sup>1592</sup> *Ibidem* Taf. 5. 3.

<sup>1593</sup> *Ibidem* Taf. 5. 6.



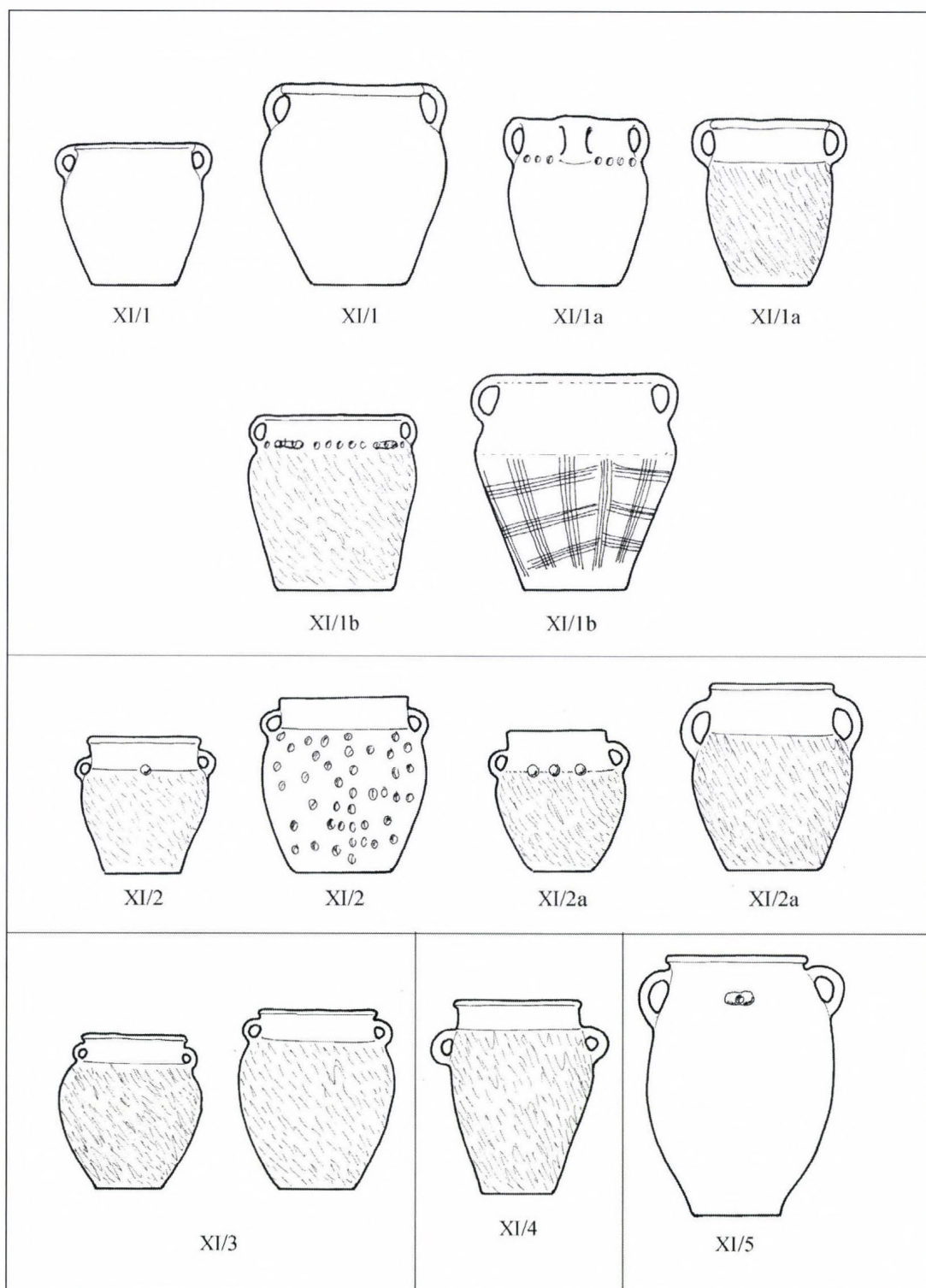


Fig. 63. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia

Type XI: two-handled pots

Type XI/1: Nagyatád–Simongát, Szava, XI/1a: Börzönce, Szava, XI/1b: Szava, Keszthely–Fenékpuszt, Szava,

XI/2: Börzönce, Szava, Pécs–Nagyárpád, XI/2a: Somogyvár–Kupavárhegy, Szava,

XI/3–4: Pécs–Nagyárpád, XI/5: Szombathely–Jáki Road

H. 14–30 cm

Most of the known pieces come from the major southern Transdanubian settlements at Börzönce, Nagyárpád and Szava. Smaller and larger pots (H. 15–26 cm) both occur among these vessels.

*Two-handled pots with the handles springing from the rim (Type XI/1; Fig. 63)*

Type XI/1

Pot with low, curved, cylindrical neck and rounded shoulder. The folded out rim is occasionally decorated with impressions,<sup>1594</sup> the shoulder is encircled by a row of finger impressions.<sup>1595</sup> Taller and shorter variants, with heights ranging between 14–16 cm and 22–30 cm, as well as finely and coarsely made pieces both occur.<sup>1596</sup> The majority of the fragmentary handled pots from Somogyvár–Kupavárhegy can be assigned to this category, without a more precise determination of their form (*Pl. 8. 8, Pl. 9. 7–8, Pl. 22. 1*).

Type XI/1a

A more elongated variant with more angular shoulder. The vessel's lower part is rusticated.<sup>1597</sup>

Type XI/1b

A wide-mouthed variant with rounded shoulder. The shoulder is sometimes encircled by a row of impressions, made either with fingers or a round implement, while the vessel part underneath the shoulder is occasionally decorated with a lattice pattern of combed bundles of lines.<sup>1598</sup>

*Two handled pots with the handles set on the neck (Types XI/2–5; Fig. 63)*

Type XI/2

Pot with slightly thickened rim, low neck and rounded shoulder. The handles spring from the neck to under the shoulder. Some of the fragmentary pots from Somogyvár–Kupavárhegy can be assigned to this type (*Pl. 8. 9, Pl. 22. 9–10, Pl. 23. 6, Pl. 25. 6, 8*). Some pots have a flattish knob on the shoulder between the handles and a rusticated lower part.<sup>1599</sup> A taller variant from Szava (H. 25 cm) is decorated with a finger impressed cordon encircling the shoulder.<sup>1600</sup> The vessel body is occasionally covered with pinched decoration.<sup>1601</sup>

Type XI/2a

Pot with slightly thickened rim, curved, elongated neck and rounded shoulder. The handles span the neck and the shoulder.<sup>1602</sup> The handles are set on the neck on the thin-walled pots from Somogyvár–Kupavárhegy (*Pl. 9. 10, Pl. 12. 6, 11, Pl. 15. 5*). Three pairs of flattish knobs are sometimes set on the shoulder (*Pl. 12. 12, Pl. 18. 3, Pl. 22. 4*).

<sup>1594</sup> Szava: *Ecsedy* (1979a) Taf. VI. 11.

<sup>1595</sup> Szava: *ibidem* Taf. XI. 3; Nagyátád–Simongát: *Bóna* (1965a) Fig. 1. 7.

<sup>1596</sup> Szava: *Ecsedy* (1979a) Taf. IV. 5, Taf. VIII. 6, 8, Taf. XI. 1, 6.

<sup>1597</sup> Börzönce: *Bondár* (1995) Type KF/1, Pl. 174. 358; Szava: *Ecsedy* (1979a) Taf. XII. 4.

<sup>1598</sup> Keszthely–Fenekpuszta: *Bóna* (1965a) Pl. XIV. 5.

<sup>1599</sup> Börzönce: *Bondár* (1995) Type KF/2, Pl. 174. 354 (H. 16 cm).

<sup>1600</sup> Szava: *Ecsedy* (1979a) Taf. XI. 4.

<sup>1601</sup> Pécs–Nagyárpád: *Bándi* (1979) 66, Fig. 4; *idem* (1981) Taf. 4. 5; Somogyvár–Kupavárhegy: *Pl. 19. 11*, in this volume.

<sup>1602</sup> Szava: *Ecsedy* (1979a) Taf. VII. 7.



#### Type XI/3

Pot with slightly thickened rim, curved cylindrical or flaring neck and rounded shoulder. The handles span the neck and the shoulder. The neck is sometimes encircled by a row of impressions, underneath which the vessel body is rusticated.<sup>1603</sup>

#### Type XI/4

Pot with slightly thickened rim, cylindrical body, angular shoulder and elongated body. The handles are set on the shoulder. The neck is polished, the vessel body underneath is rusticated.<sup>1604</sup>

#### Type XI/5

Tall cylindrical pot with slightly outturned rim and low, curved neck (H. 29.3 cm). The handles are set on the shoulder. A grooved knob adorns the shoulder.<sup>1605</sup> This pot represents a rare shape in the Somogyvár–Vinkovci culture and its cultural attribution is uncertain.

### *XII. Two-handled deep bowls (Fig. 64)*

Wide-mouthed vessels with low, curved neck and rounded shoulder with the two handles set on the shoulder or the belly are assigned to this category. Most have two handles. One taller variant reconstructed as having a pair of handles under the rim and on the belly can be assigned to the category of four-handled pots.

#### Type XII/1

The two handles span the neck.<sup>1606</sup>

#### Type XII/2

The two handles on the belly are sometimes set between two finger impressed ribs. The vessel body is smoothed (Nagykanizsa–Sánc: *Pl.* 39. 1; H. ca. 16–18 cm). A similar vessel with more elongated body has an impressed cordon around the shoulder.<sup>1607</sup>

#### Type XII/3

Wide-mouthed vessel with two loop handles on the belly. The upper part is smoothed down to the shoulder, underneath which the body is brushed (Nagykanizsa–Sánc: *Pl.* 39. 2; H. 18 cm).

### *XIII. Four-handled pots (Fig. 64)*

#### Type XIII

Wide-mouthed, deep, rounded bowl with low neck from Szava (H. 45.6 cm). Two smaller handles are set under the rim, two larger ones on the belly. A semicircular finger-impressed rib adorns the shoulder.<sup>1608</sup>

<sup>1603</sup> Pécs–Nagyárpád: *Bándi* (1981) Taf. 1. 5, Taf. 4. 6.

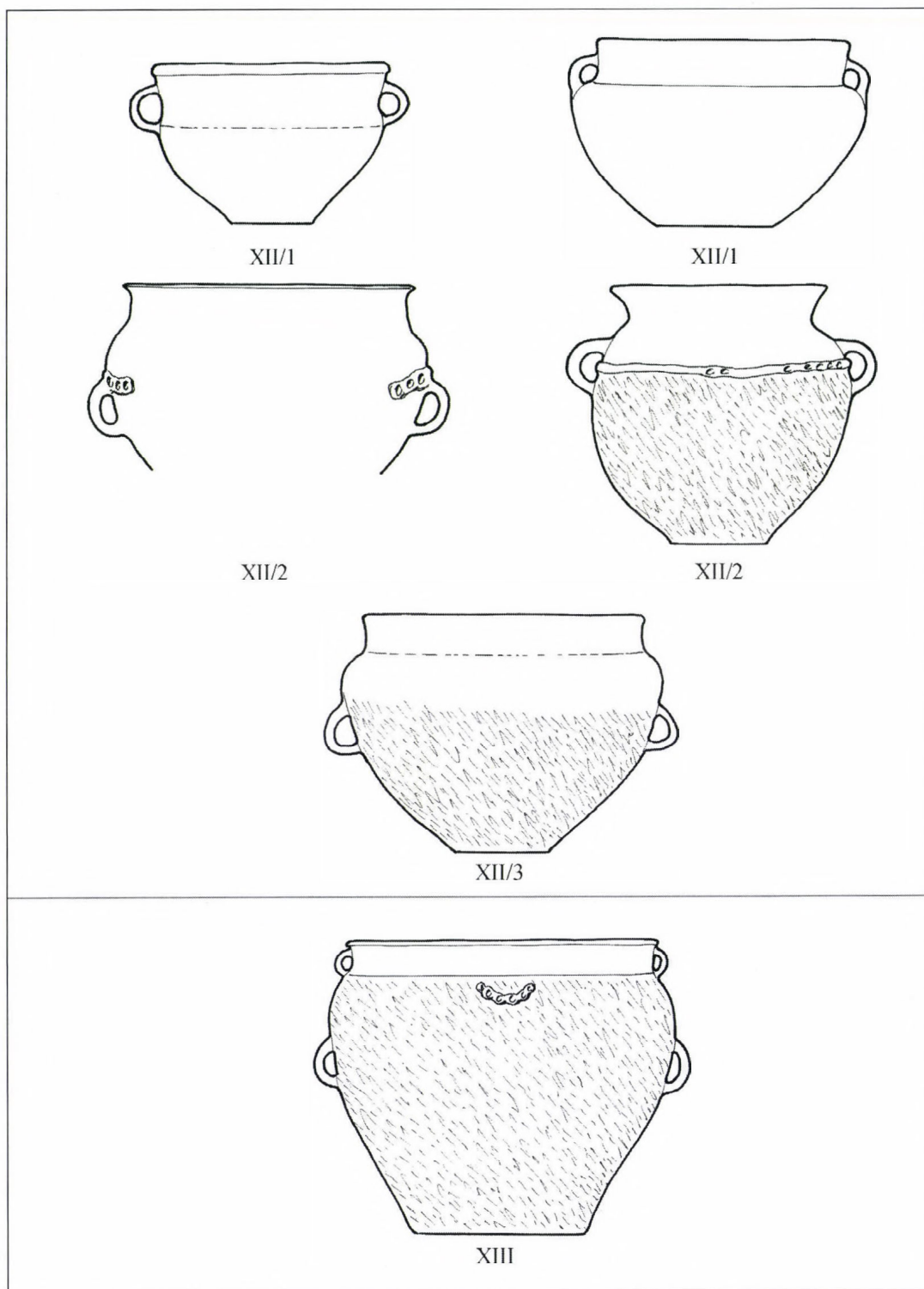
<sup>1604</sup> Pécs–Nagyárpád: *ibidem* Taf. 7. 8.

<sup>1605</sup> Szombathely–Jáki Road: *Károlyi* (1971–72) Pl. I. 3.

<sup>1606</sup> Illmitz: *Pittioni* (1954) Abb. 122. 3 (H. 13.7 cm); Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 11.

<sup>1607</sup> Dabronc–Temető: MRT 3, Pl. 23. 1.

<sup>1608</sup> Szava: *Ecsedy* (1979a) Taf. XIII. 5.



*Fig. 64. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Type XII: two-handled deep bowls and Type XIII: four-handled pots

Type XII/1: Illmitz, Nagykanizsa–Inkey kápolna, XII/2: Nagykanizsa–Sánc, Dabronc–Temető,

XII/3: Nagykanizsa–Sánc;

Type XIII: Szava

H. 13–46 cm



#### XIV. Handleless pots (Figs 65–66)

##### *Small, wide-mouthed pots (Types XIV/1–3; Fig. 65)*

Intact and reconstructable pieces are known only from the Börzönce settlement.

###### Type XIV/1

Pot with slightly thickened rim, low, curved neck and rounded shoulder. A pair of drooping lugs is set symmetrically on the rim and four symmetrically set impressed knobs are placed on the shoulder. The vessel's lower part is rusticated.<sup>1609</sup>

###### Type XIV/2

Pot with slightly thickened rim, low, curved neck and angular shoulder. A pair of drooping lugs is set symmetrically on the rim and a pair of pointed or grooved lugs is placed on the opposite side of the shoulder, which is encircled by an incised line. The vessel's lower half is rusticated.<sup>1610</sup>

###### Type XIV/3

Pot with low, curved neck and angular shoulder. A row of finger impressions encircles the shoulder.<sup>1611</sup>

##### *Large wide-mouthed pots (Type XIV/4; Fig. 65)*

###### Type XIV/4

Large wide-mouthed pot with curved neck, rounded shoulder and rounded body. Four knobs are set on the folded-out rim and knobs adorn the shoulder. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1612</sup>

###### Type XIV/4a

Tall pot with notched rim (H. 26–41 cm). A row of impressions, interrupted by a small grooved knob, encircles the shoulder.<sup>1613</sup> A smaller, plain variant (H. 16 cm) is known from Pécsvárad.<sup>1614</sup>

###### Type XIV/4b

Wider-mouthed variant decorated with a semicircular grooved rib.<sup>1615</sup>

###### Type XIV/4c

Tall pot with folded out rim and strongly rounded shoulder (H. 36.8 cm). The neckline is encircled by an impressed cordon on one variant<sup>1616</sup> and by a row of impressions on the shoulder on another.<sup>1617</sup>

<sup>1609</sup> Börzönce: *Bondár* (1995) Type F/1, Pl. 175. 381.

<sup>1610</sup> Börzönce: *ibidem* Type F/2, Pl. 175. 382.

<sup>1611</sup> Börzönce: *ibidem* Type F/4, Pl. 140. 130, Pl. 141. 135, Pl. 152. 207, Pl. 157. 244.

<sup>1612</sup> Börzönce: *ibidem* Type H/6b, Pl. 174. 363.

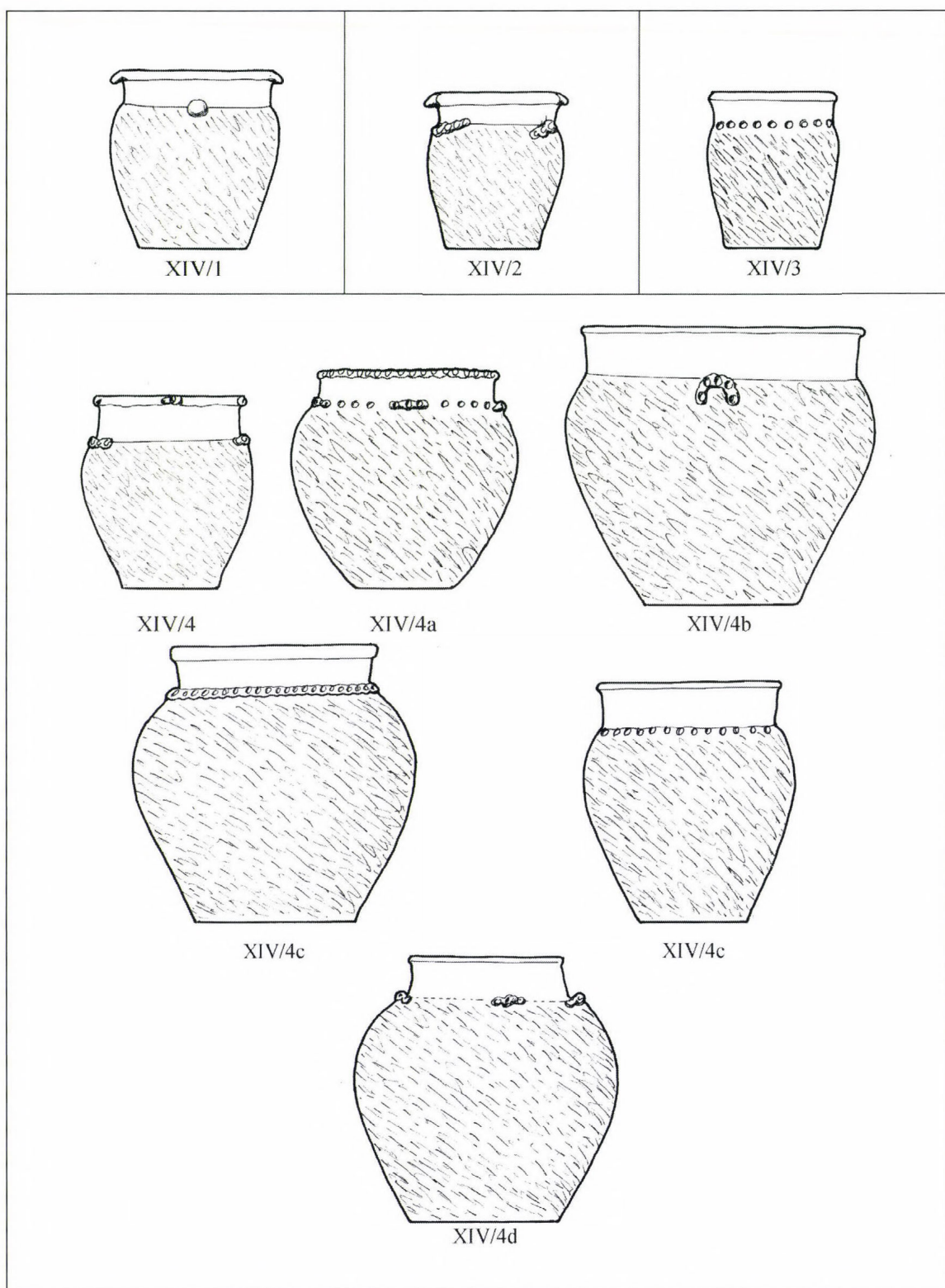
<sup>1613</sup> Szava: *Ecsedy* (1979a) Taf. VIII. 7, Taf. XIII. 4.

<sup>1614</sup> *Bóna* (1965a) Pl. XVI. 14.

<sup>1615</sup> Szava: *Ecsedy* (1979a) Taf. VII. 4.

<sup>1616</sup> Szava: *ibidem* Taf. XI. 7.

<sup>1617</sup> Pécs–Nagyárpád: *Bándi* (1979) 66, Fig. 5; *idem* (1981) Taf. 4. 3.



*Fig. 65. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Type XIV: pots

Type XIV/1–4: Börzönce, XIV/4a: Szava, XIV/4b: Szava, XIV/4c: Pécs–Nagyárpád, Szava, XIV/4d: Szava

H. 16–41 cm



#### Type XIV/4d

Squat pot with curved, cylindrical neck and rounded shoulder (H. 34.8 cm). An impressed rib is set on the shoulder.<sup>1618</sup>

#### *Tall pots (Types XIV/5–14; Fig. 66)*

#### Type XIV/5

Tall elongated pot with low, cylindrical neck and rounded shoulder (H. 45–60 cm). One variant with a rusticated or brushed surface or covered with smeared barbotine has a folded out rim and is decorated with seven symmetrically set grooved knobs.<sup>1619</sup> Another has a series of impressions on the rim and a vertical rib on the shoulder.<sup>1620</sup> A variant with angular shoulder was also widespread.<sup>1621</sup>

#### Type XIV/6

Rounded pot with low, cylindrical neck and rounded shoulder. Variants with folded out rim from Börzönce are decorated with a pair of grooved ribs and a pair of flattish or pointed knobs. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1622</sup>

Types XIV/7–8. Pots with narrow neck, rounded shoulder and elongated body

#### Type XIV/7

Narrow-mouthed pot with low, cylindrical neck and rounded shoulder.<sup>1623</sup> The vessel body is rusticated, brushed or covered with smeared barbotine.

#### Type XIV/8

Narrow-mouthed pot with low, cylindrical neck, rounded shoulder and elongated body. A short finger-impressed rib and an impressed knob is set on the shoulder. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1624</sup> One variant has a flat lug handle on the rim. The folded out rim is decorated with finger impressions.<sup>1625</sup>

<sup>1618</sup> Lengyel: *Bóna* (1965a) Pl. XV. 2; Szava: *Ecsegy* (1979a) Taf. XII. 5.

<sup>1619</sup> E.g. Börzönce: *Bondár* (1995) Type H/6a, Pl. 172. 325.

<sup>1620</sup> Nagykanizsa–Sánc: *Pl. 41. 4.*

<sup>1621</sup> Börzönce: *Bondár* (1995) Type H/7a, Pl. 174. 360; Letenye–Szentkeresztomb: *Pl. 38. 4–5*, in this volume; Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 14; Nagykanizsa–Sánc: *Pl. 41. 5*, in this volume; Pécs–Nagyárpád: *Bándi* (1981) Taf. 1. 3; Somogyvár–Kupavárhegy: *Pl. 15. 3*, in this volume; Vörs–Battyáni disznólegelő (H. 14 cm): *Bondár* (1996b) Fig. 13. 1.

<sup>1622</sup> Börzönce: *Bondár* (1995) Type H/7a, Pl. 172. 326.

<sup>1623</sup> Börzönce: *ibidem* Type H/7b, Pl. 172. 322; Pécs–Nagyárpád: *Bándi* (1981) Taf. 5. 5.

<sup>1624</sup> Börzönce: *Bondár* (1995) Type H/3, Pl. 174. 362.

<sup>1625</sup> E.g. Somogyvár–Kupavárhegy: *Pl. 17. 1*, in this volume; Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 15.

Types XIV/9–12. Pots with narrow neck, angular shoulder and elongated body

Type XIV/9

Narrow-mouthed pot with outturned rim, curved low neck and elongated body. The rim is decorated with finger impressions, interrupted by four drooping knobs. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1626</sup>

Type XIV/10

Narrow-mouthed pot with cylindrical neck and elongated body. A short finger impressed rib and an impressed knob is set on the shoulder. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1627</sup> One variant lacks the rib on the shoulder.<sup>1628</sup>

Type XIV/11

Pot with low, narrow neck, angular shoulder and elongated body. The vessel body is rusticated, brushed or covered with smeared barbotine.<sup>1629</sup> A variant with a low neck is known from Szava.<sup>1630</sup>

Type XIV/12

Pot with narrow neck, angular shoulder and elongated body. A piece from Börzönce has a thickened rim pinched into two pointed knobs opposite each other. The vessel surface is lightly rusticated.<sup>1631</sup>

Type XIV/13. Large wide-mouthed pots with constricted conical base

Pots of this type are only known from the Szava settlement.

Type XIV/13

Tall, wide-mouthed, conical pot with straight rim, low, cylindrical neck and angular shoulder (H. 42.8 cm). The shoulder is encircled by a row of impressions.<sup>1632</sup>

Type XIV/13a

Tall, wide-mouthed, conical pot with slightly outturned rim, low, cylindrical neck and rounded shoulder (H. ca. 42.8 cm).<sup>1633</sup>

Type XIV/13b

Tall, wide-mouthed, conical pot with outturned rim, curved neck and rounded shoulder (H. 50 cm).<sup>1634</sup>

Types XIV/14–15. Rounded pots with strongly outturned rim and low, indrawn neck

These vessels represent rare forms in the Transdanubian material. None have been found at Börzönce. They resemble the taller pots from Szava. A single vessel of this type is known from Pécs–Nagyárpád and

<sup>1626</sup> Börzönce: *Bondár* (1995) Type H/5, Pl. 172. 324; for smaller variants, cp. *ibidem* Pl. 133. 78, Pl. 143. 155, Pl. 146. 179, Pl. 152. 203, Pl. 163. 270.

<sup>1627</sup> Börzönce: *Bondár* (1995) Type H/4, Pl. 174. 364.

<sup>1628</sup> Somogyvár–Kupavárhegy: *Pl. 18. 12*, in this volume.

<sup>1629</sup> Börzönce: *Bondár* (1995) Type H/2, Pl. 174. 361.

<sup>1630</sup> Szava: *Ecsegy* (1979a) Taf. VII. 6.

<sup>1631</sup> Börzönce: *Bondár* (1995) Type H/1, Pl. 174. 359.

<sup>1632</sup> Szava: *Ecsegy* (1979a) Taf. V. 6, Taf. XIII. 1.

<sup>1633</sup> Szava: *ibidem* Taf. XIII. 3.

<sup>1634</sup> Szava: *ibidem* Taf. XIII. 2.



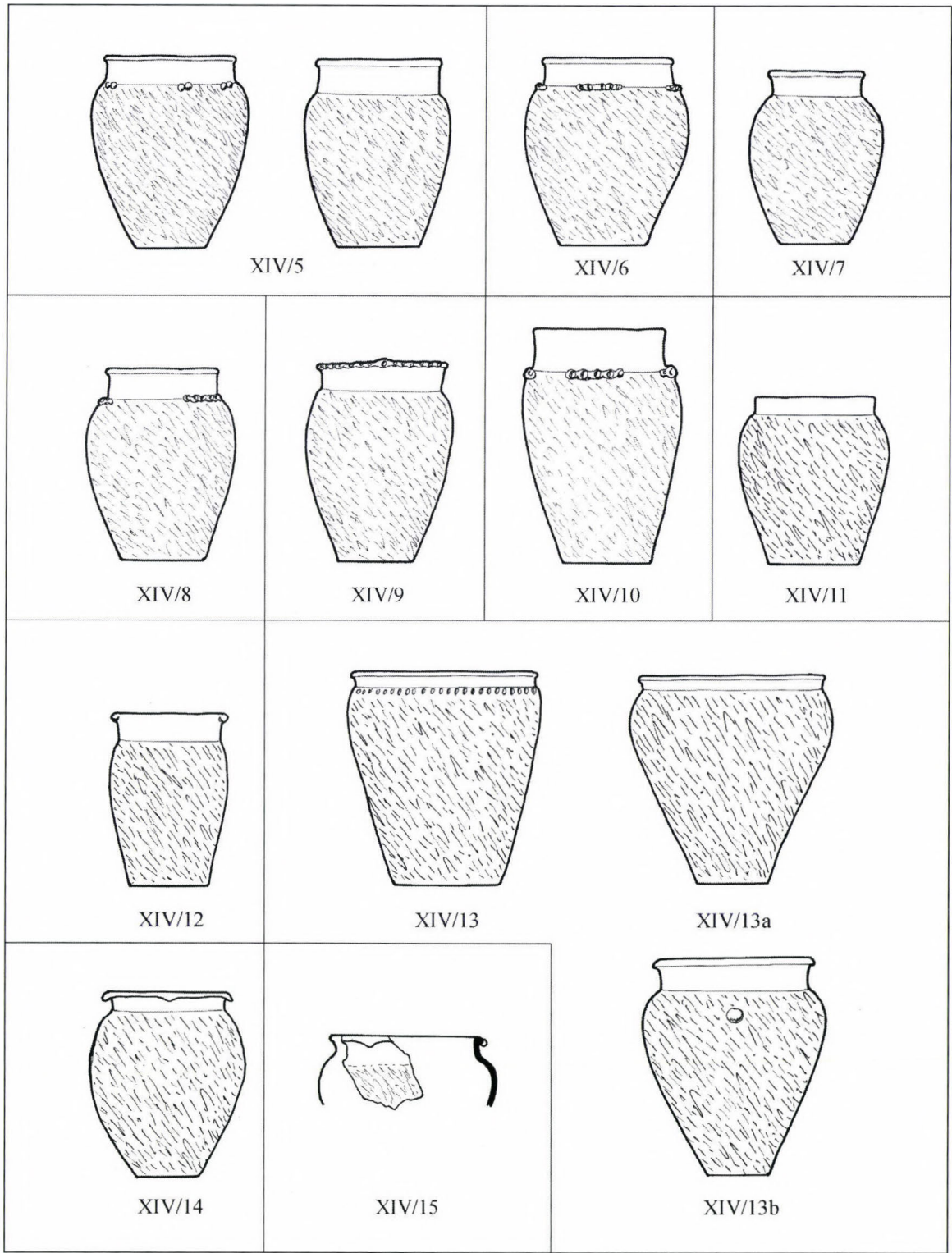


Fig. 66. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia  
Type XIV: pots  
Type XIV/5–10: Börzönce, XIV/11: Szava, XIV/12: Börzönce, XIV/13a–b: Szava,  
XIV/14: Pécs–Nagyárpád, XIV/15: Somogyvár–Kupavárhegy  
H. 30–50 cm

Somogyvár–Kupavárhegy. These pots bear a resemblance to the similar pots of the Makó–Kosihy–Čaka culture (MKČ Type XIII/3).

Type XIV/14

Ovoid pot with strongly outturned rim, low, curved neck and rounded shoulder. Flat lugs are set symmetrically on the rim.<sup>1635</sup>

Type XIV/15

Pot with strongly outturned rim, low, curved neck and rounded shoulder. A flat lug handle is set on the rim. The neck is smoothed, the rest of the vessel is rusticated under the shoulder (Somogyvár–Kupavárhegy: Pl. 8. 12). Fragments of similar pots with oblique rim are also known.

*XV. Amphoras (Fig. 67)*

Several variants of classical two-handled amphoras can be distinguished in the culture's ceramic repertoire. Most have a narrow cylindrical neck and two strap handles set on the shoulder or belly. These vessels are quite tall, with a height ranging between 45 and 72 cm. Several neck fragments can probably be assigned to amphoras.<sup>1636</sup> One such fragment from Somogyvár is decorated with a cordon (Pl. 24. 14).

Several body fragments from amphoras or storage jars, whose shape cannot be accurately determined, came to light at Somogyvár–Kupavárhegy. Many of these have a strap handle (Pl. 9. 14, Pl. 12. 14, Pl. 17. 4, Pl. 24. 2) and the occasional moustache rib. Similarly to bowl handles, these handles are decorated with punctates (Pl. 25. 4). Amphoras and storage jars are often adorned with a wavy or horizontal cordon (Pl. 14. 4, Pl. 19. 8), vertical ribs (Pl. 18. 6, 10) or concentric circles (Pl. 15. 6).

All of these vessel forms occur in the Vučedol–Zók culture<sup>1637</sup> from the Vučedol B2 period onward.

Type XV/1

Amphora with cylindrical neck, rounded shoulder and constricted lower part. The two handles are set slightly under the carination.<sup>1638</sup> A thin-walled, smoothed body fragment<sup>1639</sup> and a cylindrical neck fragment<sup>1640</sup> from Börzönce can probably be assigned here.

Type XV/1a

This variant resembles Type XV/1, but has a shorter neck. A cordon encircles the shoulder and the carination. The vessel surface is rusticated underneath the carination.<sup>1641</sup>

<sup>1635</sup> Pécs–Nagyárpád: *Bándi* (1973) Pl. III.

<sup>1636</sup> E.g. Somogyvár–Kupavárhegy: Pl. 8. 7, in this volume; Pókaszeptek: *Bóna* (1965a) Pl. XIV. 8; Szava: *Ecsedy* (1979a) 102.

<sup>1637</sup> Zók–Várhegy: *Schmidt* (1945) Textbild 84. 1; Vinkovci–Hotel: *Vučedol* (1988) cat. no. 175.

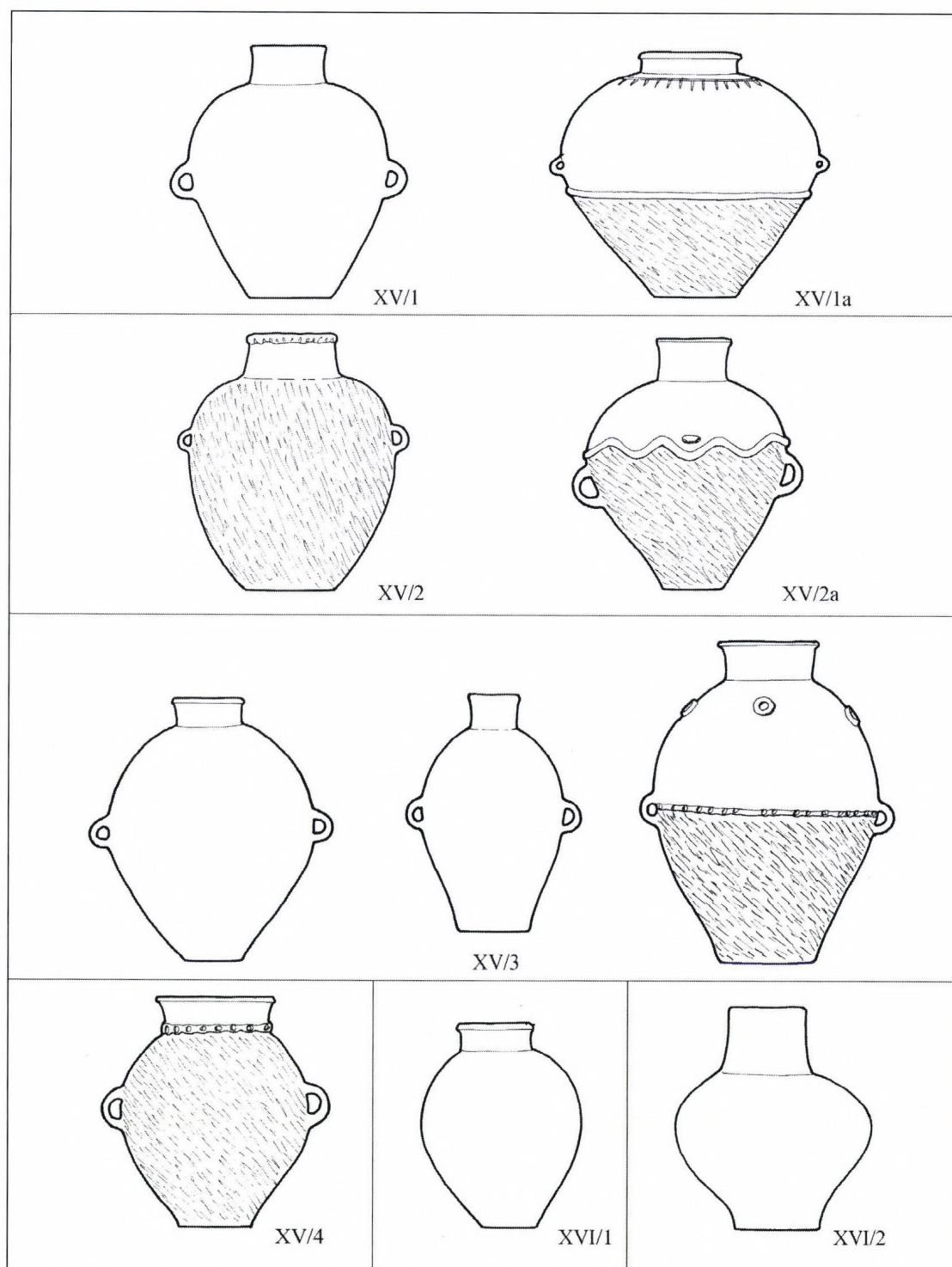
<sup>1638</sup> Pécs–Nagyárpád/or Zók–Várhegy: *Bándi* (1979) 66, Fig. 6.

<sup>1639</sup> *Bondár* (1995) Type A/1, Pl. 172. 327.

<sup>1640</sup> *Ibidem* Type A/2, Pl. 147. 184.

<sup>1641</sup> Rajka: *Figler* (1994) Abb. 9. 1.





*Fig. 67. Vessel types of the Somogyvár–Vinkovci culture in Transdanubia*

Type XV: amphoras and Type XVI: amphora-like vessels

Type XV/1: Pécs–Nagyárpád, Zók–Várhegy, XV/1a: Rajka, XV/2: Nagykanizsa–Inkey kápolna,

XV/2a: Somogyvár–Kupavárhegy, XV/3: Gönyű–Hömbölgő, Börzönce, Ajka,

XV/4: Somogyvár–Kupavárhegy;

Type XVI/1: Celldömölk–Sághegy, XVI/2: Szombathely–Jáki Road

H. 37–72 cm

#### Type XV/2

Amphora with less rounded shoulder and more elongated body. The rim resembles the notched folded out rim form.<sup>1642</sup> The handles are set on the carination. Most of the known vessels of this type are fragmentary.<sup>1643</sup> The strap handles are often accentuated with a short finger-impressed moustache rib<sup>1644</sup> and, occasionally, a smaller stringhole lug above the handle.<sup>1645</sup> The latter is typical for the Somogyvár–Vinkovci culture.

#### Type XV/2a

A decorated variant of this amphora type is known from Somogyvár (198/Trench T1; H. 48 cm). Two wide strap handles are set opposite each other on the belly. A wavy cordon encircles the shoulder; the vessel surface is smoothed above the cordon and rusticated underneath. A pair of long, flat ledge handles is set above the cordon.

#### Type XV/3

Several variants of amphoras with ovoid body can be distinguished. One variant has a low, cylindrical neck and a smoothed surface (H. 56.5 cm),<sup>1646</sup> and resembles Type XVI/1 to some extent. A thin-walled variant with smoothed surface has a low, flaring neck,<sup>1647</sup> and a variant with a wider neck is also known (H. 50 cm).<sup>1648</sup>

A large decorated variant is known from Ajka (H. 72 cm). The vessel is decorated with an impressed disc shaped knob on the shoulder and a finger impressed cordon around the carination; the vessel surface is smoothed above the cordon and rusticated underneath.<sup>1649</sup>

#### Type XV/4

Amphora with low, flaring neck and squat, ovoid body (Somogyvár–Kupavárhegy (198/Trench T1; H. 46.3 cm). Two strap handles are set opposite each other on the carination. The neck is smoothed, the rest of the body is rusticated. The neck is encircled by a finger-impressed cordon. This vessel type is known only from its fragments.<sup>1650</sup>

### XVI. Amphora-like vessels (Fig. 67)

These vessels are rare finds in the culture's Transdanubian distribution.

#### Type XVI/1

Ovoid vessel with thickened rim and low, cylindrical neck.<sup>1651</sup> Its shape best resembles the amphora from the Gönyű burial (cp. Type XV/3).

<sup>1642</sup> Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 16.

<sup>1643</sup> Börzönce: Bondár (1995) Type H/9, Pl. 143. 154, Pl. 147. 180, 182, Pl. 158. 246, 249, Pl. 161. 259, 262.

<sup>1644</sup> Börzönce: *ibidem* Type H/9, Pl. 158. 247.

<sup>1645</sup> Börzönce: *ibidem* Type H/9, Pl. 158. 249.

<sup>1646</sup> Gönyű–Hömbölgő: Bóna (1965a) Pl. XIII. 2.

<sup>1647</sup> Börzönce: Bondár (1995) Type A/3, Pl. 172. 323.

<sup>1648</sup> Neusiedl am See: Pittioni (1954) Abb. 121. 2.

<sup>1649</sup> Ajka: Bóna (1965a) Pl. XIII. 1.

<sup>1650</sup> Börzönce: Bondár (1995) Type H/8, Pl. 138. 113, Pl. 142. 145, Pl. 147. 181.

<sup>1651</sup> Celldömök–Sághegy: Bóna (1965a) Pl. XII. 7. According to the description, the vessel lacked handles.



#### Type XVI/2

Vessel with tall cylindrical neck and conical shoulder (H. 39.3 cm).<sup>1652</sup> The upper half of a comparable narrow-mouthed vessel with low, curving neck, conical shoulder and a flat, finger-impressed ledge handle on the rim is known from Vörs.<sup>1653</sup>

#### XVII. *Vessel open at both ends (Fig. 68)*

The function of this ceramic artefact with open ends is enigmatic. Three pieces are known from the culture's distribution. In her analysis of the specimen from Börzönce (H. 21 cm),<sup>1654</sup> Bondár noted that no traces of burning or wear could be noted on the surface, suggesting that it could hardly have been an ember cover or a portable hearth. She suggested a use as a strainer (with one end covered with a piece of textile) or perhaps a drum (with one end covered with leather). A possible use as a vessel stand is also possible.

Two comparable artefacts are known. An artefact with a different shape (also open at both ends), but a presumably similar function came to light on the Batrovci–Gradina settlement in the Srem (Fig. 70. 16).<sup>1655</sup>

The reconstruction of the vessel from Pit 30 of the Dunaföldvár–Kálváriadomb settlement is uncertain.<sup>1656</sup> The published drawing shows a vessel which may be regarded as the upper half of a narrow necked storage jar, but it is uncertain whether this was the original form of the artefact or whether it represents the secondary use of a broken vessel. The pit was dated to the site's proto-Nagyrév occupation.

#### XVIII. *"Altar" (Fig. 68)*

Fragment of a small bowl, originally set on four feet, from Nagykanizsa–Inkey kápolna.<sup>1657</sup> Bondár interpreted this artefact as the model of a throne-like stool or a small altar.

#### XIX. *Suspension vessel*

Wide-mouthed vessel with curved neck and prominent shoulder set on a hollow pedestal. There are two small handles for suspension on the shoulder, the latter decorated with a row of triangles.<sup>1658</sup> A stray vessel of this type is known from the Lengyel settlement. Its cultural attribution is uncertain in the lack of matching pieces from secure contexts.

#### XX. *Vessels with asymmetrical handles*

Surprisingly enough, very few reconstructable vessels with asymmetrical handles are known from the Transdanubian distribution of the Somogyvár–Vinkovci culture. The single reconstructable specimen, a biconical vessel with cylindrical neck and probably asymmetrical handles, came to light

<sup>1652</sup> Szombathely–Jáki Road: *Károlyi* (1971–72) Pl. I. 1.

<sup>1653</sup> Vörs–Battyáni disznólegelő: *Bondár* (1996b) Fig. 12. 1.

<sup>1654</sup> Börzönce: *Bondár* (1995) 205, 212, Pl. 174. 356.

<sup>1655</sup> Batrovci–Gradina: *Tasić* (1984) Taf. III. 6.

<sup>1656</sup> *Szabó* (1992) Pl. LIX. 3, Pl. LXXXIII. 3.

<sup>1657</sup> *Bondár* (2003) 57, Fig. 4. 87.

<sup>1658</sup> Lengyel: *Bóna* (1965a) Pl. XV. 7.

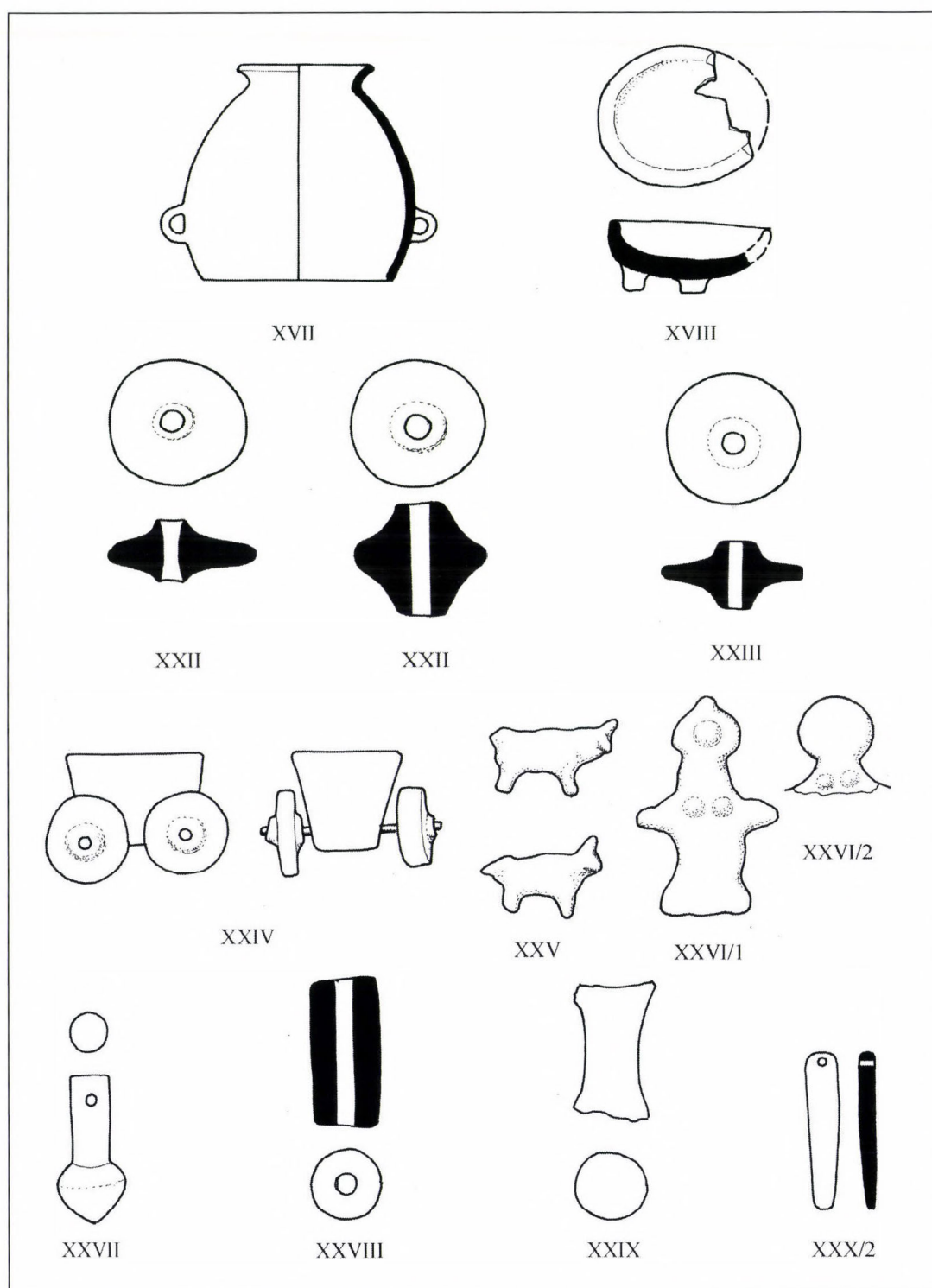


Fig. 68. Object types of the Somogyvár–Vinkovci culture in Transdanubia

Type XVII. vessel open at both ends: Börzönce; Type XVIII. altar: Nagykanizsa–Inkey kápolna;  
 Type XXII. spindle whorls: Börzönce, Nagykanizsa–Inkey kápolna; Type XXIII. wheel models: Börzönce;  
 Type XXIV. wagon model: Börzönce; Type XXV. animal figurines: Börzönce; Type XXVI. human figurines:  
 XXVI/1: Börzönce, XXVI/2: Pécs–Nagyárpád; Type XXVII. amulet: Nagykanizsa–Inkey kápolna,  
 Type XXVIII. clay loom weights and sinkers: Polány, Type XXIX. clay spools: Börzönce;  
 Type XXX.2. perforated whetstone or amulet: Börzönce



at Szava.<sup>1659</sup> The absence of this vessel type from Transdanubia is striking, especially in view of the fact that the type is one of the culture's hallmarks south of the Drava during the late Somogyvár–Vinkovci period (Fig. 69. 10–11; cp. also MKČ Type II).

### XXI. Spouted vessels

Fragments of spouted vessels have been published from the Pécs–Nagyárpád settlement<sup>1660</sup> and the fragment of a spouted vessel decorated in the stab-and-drag style is known from Somogyvár–Kupavárhegy. No other comparable pieces are known from the culture's ceramic repertoire.

### Miscellaneous clay objects

#### XXII. Spindle whorls (Fig. 68)

Type XXII/1

Biconical spindle whorl,<sup>1661</sup> occasionally decorated with a pattern of punctates.

Type XXII/2

Conical spindle whorl with flat base (Diam. 3–4 cm).<sup>1662</sup>

Type XXII/3

Flat, disc shaped spindle whorl made from a broken vessel fragment.<sup>1663</sup>

#### XXIII. Wheel models (Fig. 68)

While the single currently known wheeled wagon model of the Somogyvár–Vinkovci culture came to light at Börzönce,<sup>1664</sup> small clay discs with a central perforation and a raised ridge around it, interpreted as wheel models, are known from several sites. In addition to smaller pieces with a diameter of 3–4 cm,<sup>1665</sup> several larger ones with a diameter of 6–10 cm are also known.<sup>1666</sup> Obviously, these clay discs can hardly have all been wheel models owing to their relatively high number; some were probably simple spindle whorls. It has also been suggested that the larger wheel models had probably been attached to wagon models carved from wood rather than ones of clay.<sup>1667</sup>

<sup>1659</sup> Szava: *Ecsedy* (1979a) 101, Taf. I. 1.

<sup>1660</sup> Pécs–Nagyárpád: *Bándi* (1980) Fig. 1. 7, 8, 12, Fig. 6. 18; *idem* (1981) Taf. 8. 18.

<sup>1661</sup> Börzönce: *Bondár* (1995) Pl. 179. 444, 447; Nagyörbő–Várhegy: *Nováki* (1965) Fig. 4. 9; Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 6, 7; Somogyvár–Kupavárhegy: *Pl. 10. 20, Pl. 17. 6, Pl. 25. 10*, in this volume; Szava: *Ecsedy* (1979a) Taf. II. 15.

<sup>1662</sup> Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 5; Polány: *Pl. 32. 5–6*, in this volume.

<sup>1663</sup> Győrszemere–Tóth tag: *Figler* (1994) Abb. 8. 13.

<sup>1664</sup> Seven intact and nine fragmentary pieces: *Bondár* (1995) 218, Pl. 179. 445–446, 454 and Pl. 179. 438–441, 443, 450–453, 455–457.

<sup>1665</sup> Nagyörbő–Várhegy: *Nováki* (1965) Fig. 4. 11; Somogyzsitfa: *Pl. 30. 9*, in this volume; Szava: *Ecsedy* (1979a) Taf. II. 16–17; Nagykanizsa–Inkey kápolna: *Horváth* (1983b) Fig. 5. 4.

<sup>1666</sup> Nagyörbő–Várhegy: *Nováki* (1965) Fig. 4. 10; Polány: *Pl. 32. 7*, in this volume; Szava: *Ecsedy* (1979a) Taf. II. 18, Taf. IV. 8; Somogyvár–Kupavárhegy: *Pl. 13. 1*, in this volume; Letenye–Szentkeresztomb: *Pl. 38. 2*, in this volume; Gyulaj–Banyahegy: *Pl. 46. 12*, in this volume.

<sup>1667</sup> *Bóna* (1992c) 74. Small wheel models are frequently found on Middle Bronze age tell settlements. It has been suggested that some of these had perhaps been fixed to wooden, rather than clay wagon models:

Several wheel models can be quoted from the Vučedol period<sup>1668</sup> and, later, from the Glina III–Schneckenberg distribution.<sup>1669</sup> Wheel models have recently been found on a settlement of the Nyírség culture too.<sup>1670</sup> A clay disc of this type from the Makó–Kosihe–Čaka settlement at Domony<sup>1671</sup> has also been interpreted as a wheel model (MKČ Type XXII).<sup>1672</sup>

#### XXIV. Wagon model (Fig. 68)

The single wagon model from the culture's Transdanubian distribution, a fragment of the wagon's lower body, came to light at Börzönce (L. 5.4 cm, W. 3.9 cm and 3.2 cm, H. 1.6 cm).<sup>1673</sup> The solid wheels were fixed to the axle under the wagon body. The wagon box is decorated with an incised line. The surviving fragment provides no clues as to the mode of traction. The pit from which the wagon model was recovered also contained a wheel model, probably one of the original wheels fixed to the wagon. Several other wheel models were recovered from various features of the Börzönce settlement.

Although much scarcer, depictions of wagons and wheels are known from the period between the Late Copper Age Baden culture and the Middle Bronze Age Gyulavarsánd, Ottomány and Wietenberg cultures.<sup>1674</sup> A wagon model of the Vučedol period was brought to light at Vučedol<sup>1675</sup> and an almost identical piece can be quoted from Cuculata/Kuculáta in the Transylvanian distribution of the Glina III–Schneckenberg culture.<sup>1676</sup> While a profane use as toys seems more likely in the case of the simple wagon models of the Early Bronze Age, a ritual function seems possible for some of the more elaborately decorated models of the Late Copper Age and the Middle Bronze Age.

#### XXV. Animal figurines (Fig. 68)

Several figurines modelled in the shape of various animals came to light at Börzönce. This is all the more remarkable because not one single figurine of this kind (or clay wheel models for that matter) were recovered from Szava, the culture's other extensively investigated settlement in Transdanubia. The Börzönce settlement thus stands out from among the sites in the south-eastern Transdanubian territory.

Six pits of the Börzönce settlement yielded animal figurines. Most pits contained between one and eight pieces. Modelled from a single lump of clay, the schematic figurines portrayed bovines,<sup>1677</sup>

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Tárnoki (1999) 170–171. For a recent overview of the earliest depictions and use of wheeled vehicles in the Ancient Near East and Europe, cp. Bakker *et al.* (1999).

<sup>1668</sup> Vučedol: Vučedol (1988) cat. no. 24.

<sup>1669</sup> Schuster (1997) Fig. 46. 1.

<sup>1670</sup> Dani (1999) 67, Pl. 7. 11, Pl. 9. 3.

<sup>1671</sup> Kalicz (1968) Taf. CXIII. 8; *idem* (1984b) Taf. XXIII. 4.

<sup>1672</sup> Bondár (1995) 217.

<sup>1673</sup> Börzönce, Pit J: Bondár (1990); *idem* (1992); *idem* (1995) 216, Pl. 177. 422.

<sup>1674</sup> For a recent overview, cp. Bondár (1990); *idem* (1992); *idem* (2004). For overviews on the wagons of the Middle Bronze Age, cp. Bóna (1960a); *idem* (1992c) 73–75; Boroffka (1994); Schuster (1997); Tárnoki (1999) 170–171.

<sup>1675</sup> Vučedol (1988) cat. no. 24.

<sup>1676</sup> Bichir (1964); Petrescu-Dîmbovița (1974) Fig. 2.

<sup>1677</sup> Börzönce: Bondár (1995) 216, Pls. 177–178. 399, 400, 412, 423.



sheep,<sup>1678</sup> pigs<sup>1679</sup> and dogs.<sup>1680</sup> The sex of the male animals was strongly emphasised. A small cattle figurine, whose head had broken off, came to light at Nagykanizsa–Inkey kápolna, a settlement lying in south-western Transdanubia.<sup>1681</sup>

Comparable animal figurines modelled from clay are known from the Slavonian Phase II (Vučedol C)<sup>1682</sup> and Phase III (Rudina I)<sup>1683</sup> of the Vučedol culture, suggesting that the idea/tradition of animal depictions reached south-western Transdanubia from this cultural milieu. Animal depictions have so far only been found on these settlements of the Somogyvár–Vinkovci culture. Interestingly enough, not one single figurine has yet been reported from the Makó–Kosihy–Čaka distribution despite the fact that the culture's population was engaged in pastoralist stockbreeding.

Moving farther, evidence for small animal figurines comes from the smaller regional groups of the Early Bronze Age in Transylvania. Animal depictions are known from the Coțofeni period.<sup>1684</sup> Figurines portraying various creatures have been published from the Glina III–Schneckenberg sites in southern Transylvania,<sup>1685</sup> from the Livezile sites in central and south-western Transylvania,<sup>1686</sup> and from the sites of the Zăbăla group in south-eastern Transylvania.<sup>1687</sup> On the testimony of the slightly differently modelled animal figurines of the Hatvan culture, depictions of this type again became more popular at the close of the Early Bronze Age.<sup>1688</sup>

#### XXVI. Human figurines (Fig. 68)

The figurines of the Somogyvár–Vinkovci culture can be regarded as portrayals of women owing to the prominent depiction of secondary sex characteristics, such as breasts. The height of the small figurines set on oval feet is usually 6–7 cm.

##### Type XXVI/1

An intact figurine and a figurine head came to light at Börzönce.<sup>1689</sup> The depiction of the nose is unusually emphatic on the triangular, slightly thrown-back head. A pair of parallel incised lines encircles the body under the breasts on the figurine from Nagygörbő–Várhegy,<sup>1690</sup> resembling the fragment from Dörgicse.<sup>1691</sup>

<sup>1678</sup> Börzönce: *Bondár* (1995) 216, Pls. 177–178. 401–405, 411, 413, 414.

<sup>1679</sup> Börzönce: *ibidem* 216, Pls. 177–178. 406, 407, 417, 418.

<sup>1680</sup> Börzönce: *ibidem* 216, Pls. 177–178. 415, 420, 424.

<sup>1681</sup> *Horváth* (1983b) Fig. 5. 2; cp. Börzönce: *Bondár* (1995) Pls. 177–178. 423.

<sup>1682</sup> Apatovac: *Marković* (1981) T. 5. 3–4, 6.

<sup>1683</sup> Koprivnička Rijeka, Rudina I: *Marković* (1981) T. 19. 8, 12.

<sup>1684</sup> *Roman* (1976) Fig. 52. 1–5.

<sup>1685</sup> *Prox* (1941) Pl. XI. 1, 3–8, 10; *Machnik* (1987) Fig. 8. 22; *idem* (1991a) Fig. 7. 22; Odaia Turcului: *Tudor* (1982) Abb. 5. 9; *Schuster* (1997) Fig. 44. 4, Fig. 53. 1–3, 5–6.

<sup>1686</sup> Soimus/Marossolymos–Cuculeu: *Ciugudean* (1996) Fig. 73. 20.

<sup>1687</sup> *Székeley* (1997) Pl. XXIX. 1–10, Pl. XXX. 1–5.

<sup>1688</sup> *Kalicz* (1968) Taf. LIX. 7–15, Taf. LXIV. 1–18.

<sup>1689</sup> *Bondár* (1995) Pl. 120. 1, 2.

<sup>1690</sup> The head and the left arm broke off: *Nováki* (1965) Fig. 7.

<sup>1691</sup> The head and the hands broke off: MRT 2, Pl. 6. 3.

#### Type XXVI/2

The modelling of the figurine fragment from Pécs–Nagyárpád differs from the above type. Only the upper part of the figurine survived: the round, flattened head with the schematic face depiction, and the neck and the breasts immediately below the neck.<sup>1692</sup>

A figurine from Celldömölk–Sághegy<sup>1693</sup> was described as resembling the pieces from Velem. Kalicz assigned this figurine to the Makó–Kosihy–Čaka culture in view of its resemblance to the ones from Velem.<sup>1694</sup> This cultural attribution can be challenged in the light of a few finer details (cp. MKČ Type XXIII/3).

Compared to the preceding Vučedol period, the number of anthropomorphic depictions declined in the late Vučedol and the Somogyvár–Vinkovci periods.

Two major figurine types can be distinguished in the Vučedol culture: the first emphasises secondary sex characteristics and depicts clothing,<sup>1695</sup> the second is a more schematic portrayal with emphatically modelled breasts.<sup>1696</sup> The latter can be regarded as the forerunners of the known figurines of the Somogyvár–Vinkovci culture.

In her recent overview of the figurines of the Somogyvár–Vinkovci culture and the Early Bronze Age, Bondár noted the presence of these two traditions in the period's anthropomorphic depictions, both of which survived until the Iron Age.<sup>1697</sup> The continuation of these two modes of portrayal in the Somogyvár–Vinkovci culture can most likely be explained by the blend of Vučedol traditions and new cultural impacts from the south. Comparable figurines can also be quoted from the Coțofeni<sup>1698</sup> and the Glina III–Schneckenberg cultures.<sup>1699</sup>

#### XXVII. Amulet (Fig. 68)

A small clay artefact, earlier interpreted as a phallus, was found at Nagykanizsa–Inkey kápolna.<sup>1700</sup> Comparable artefacts are known from the contemporaneous Vučedol III sites in Slovenia.<sup>1701</sup> The form allows an interpretation as a small figurine or amulet, which may have been worn around the neck or as a costume accessory.

#### XXVIII. Clay loom weights and sinkers (Fig. 68)

The cylindrical perforated clay loom weights/sinkers from the culture's Transdanubian distribution come in different sizes.<sup>1702</sup>

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<sup>1692</sup> Bándi (1979) 67.

<sup>1693</sup> Mozsolics (1945) 44.

<sup>1694</sup> Kalicz (1968) 80, Fo. 54.

<sup>1695</sup> Vinkovci (Vučedol B2): Težak (1975) Abb. 1–3; Dimitrijević (1977–78) Taf. 14. 3, 9; Vučedol: Schmidt (1945) Textbild 76. 5; Ig: Korošec–Korošec (1969) T. 1. 1, 3, T. 2. 1.

<sup>1696</sup> Vinkovci (Vučedol B2), with less prominent breasts: Težak (1975) Abb. 4, Abb. 18 (fragment); Dimitrijević (1977–78) Taf. 14. 5; Apatovac, with more prominently modelled breasts: Dimitrijević (1956a) Taf. XII. 78.

<sup>1697</sup> Bondár (1995) 218–220.

<sup>1698</sup> Roman (1977) Taf. 39. 6.

<sup>1699</sup> Nestor (1927–1932) Fig. 5. 11, Fig. 6. 10, 12; Schroller (1933) Taf. 53. 15, 18–19; Prox (1941) Taf. XI. 2.

<sup>1700</sup> Horváth (1983b) 12, Fig. 5. 1.

<sup>1701</sup> Koprivnička Rijeka, Rudina I: Marković (1981) T. 19. 6.

<sup>1702</sup> Börzönce, Feature L: Bondár (1995) 461; Nagygörbő–Várhegy: Nováki (1965) Fig. 4. 12–14; Polány: Pl. 32. 8, in this volume; Borsosgyőr–Szilfa: Ilon (1995) Pl. III. 2–3.



## XXIX. Clay spools (Fig. 68)

A small cylindrical clay artefact with flaring terminals was found at Börzönce,<sup>1703</sup> whose function remains enigmatic.

## Lithics

Very few lithic finds have been published to date. Stone artefacts are rare in the material from excavated settlements.

### Type XXX/1

Trapezoidal celt shaped chisel.

Two small trapezoidal chisels/axe came to light at Börzönce.<sup>1704</sup> Similar stone tools can be cited from Szava.<sup>1705</sup>

### Type XXX/2

Perforated whetstone or amulet (Fig. 68).

A longish, cigar shaped whetstone was found at Börzönce.<sup>1706</sup> One end was perforated, perhaps for suspension. Although Bondár interpreted this artefact as a sandstone loomweight, its form resembles a whetstone or a small amulet on the published drawing. A similar artefact was found among the grave goods of the Rajka–Modrovich-pusztá grave.<sup>1707</sup>

### Type XXX/3

Stone blades.

Stone blades are rare finds on the culture's sites. The few known pieces have not been sourced.<sup>1708</sup>

## Bone

Bone tools (a needle and an awl) and antler tools (an axe, a hoe, cut antler fragments) came to light on the Szava settlement.<sup>1709</sup> A bone awl has been published from Nagykanizsa–Inkey kápolna.<sup>1710</sup>

## Metallurgy and metalwork<sup>1711</sup>

Evidence for local metalworking comes from moulds and various other artefacts, such as crucibles, used during metal casting.

<sup>1703</sup> Börzönce, Feature B: Bondár (1995) Pl. 181. 435.

<sup>1704</sup> Börzönce: *ibidem* Pl. 179. 458–459.

<sup>1705</sup> *Ecsegy* (1979a) Taf. I. 6.

<sup>1706</sup> Börzönce, Feature 1: Bondár (1995) Pl. 179. 426.

<sup>1707</sup> Rajka: Figler (1994) Abb. 9. 5.

<sup>1708</sup> Börzönce, Features É, O, 11: Bondár (1995) Pl. 181. 436, 437.

<sup>1709</sup> Szava: *Ecsegy* (1979a) Taf. XIV.

<sup>1710</sup> Nagykanizsa–Inkey kápolna: Horváth (1983b) Fig. 5. 3.

<sup>1711</sup> Cp. also pp. 167.

### *Crucibles and tuyères*

The perhaps most important artefacts used for alloying, crucibles made their appearance during the late Vučedol period. The crucibles used during this period in Transdanubia are represented by the pieces from Zók-Várhegy. Two variants can be distinguished: (1) a semi-spherical bowl with thickened rim, a small spout springing from the rim and an incised lattice pattern in its interior, and (2) a small, crudely made conical crucible with rounded base.<sup>1712</sup>

A small conical bowl with strongly outturned wide rim and a small knob under the rim from Pécs-Nagyárpád, a settlement dated to the late Vučedol/early Somogyvár-Vinkovci period, was interpreted as a crucible by Ecsedy.<sup>1713</sup> A similar, but more finely made small bowl is known from Polány (cp. Type VIII/5; *Fig. 56*).

Tuyères can be regarded as an indication of local metalworking. An artefact of this type is known from Kánya (*Pl. 34. 7*).

### *Pin mould and pins*

Bondár interpreted a small clay artefact with a small depression from the Börzönce settlement as a mould for casting pins<sup>1714</sup> and argued that the use of pins could thus be documented at an early date in Transdanubia, preceding the use of pins as clothing accessories in the Kisapostag culture, whose population adopted this tradition from the south.<sup>1715</sup>

A single pin is mentioned among the grave goods of the cremation burial uncovered at Keszthely-Lehenrét;<sup>1716</sup> the metal composition and the exact type of the pin were not specified. A broken pin was found in a cremation burial of the Makó-Kosihy-Čaka culture at Magyarcsanak-Bökény.<sup>1717</sup> Although scanty, these finds certainly indicate the early manufacture and use of pins in the Carpathian Basin. However, the interpretation of the clay artefact from Börzönce as a mould for casting pins is controversial.

### *Flat axes*

Finds of a “flat trapezoidal axe”<sup>1718</sup> and a “flat bronze axe”<sup>1719</sup> are mentioned from south-eastern Transdanubia.

<sup>1712</sup> Ecsedy (1983a) 72, 76, Figs 38–40 and Fig. 44.

<sup>1713</sup> Ecsedy (1990) 227, Fig. 10.

<sup>1714</sup> Bondár (1995) 214–216, Pl. 179. 432, Pl. 181. 432.

<sup>1715</sup> Szathmári (1988); Bondár (1995) 215.

<sup>1716</sup> MRT 1, Site 21/56, Pl. 7. 12, 14.

<sup>1717</sup> Kürti (1974) 38–39, Fig. 17.

<sup>1718</sup> Szemely-Poljanak-Törökdomb: Bándi (1979) 71.

<sup>1719</sup> Majs-Vuka Baba: *ibidem* 71.



The manufacture of shaft-hole axes in Transdanubia began during the Vučedol period.<sup>1720</sup> The production of these axes continued during the early<sup>1721</sup> and late phase<sup>1722</sup> of the Somogyvár–Vinkovci culture. Evidence for metalworking in the post-Vučedol period principally comes from settlements on which traces of late Vučedol occupation have been documented. A broken two-part mould for a shaft-hole axe was found during the survey of the Döbrököz–Tűzköves settlement in south-eastern Transdanubia, occupied during the late Vučedol and the Somogyvár–Vinkovci periods (*Pl. 43. 2*). Finds indicating the local manufacture of shaft-hole axes during the early Somogyvár–Vinkovci period are known from Pécs–Nagyárpád<sup>1723</sup> and Kaposújlak–Várdomb.<sup>1724</sup> In north-western Transdanubia, moulds for casting Kozarac type axes were brought to light on the smaller open settlements at Ravazd–Villibald domb<sup>1725</sup> and Hidegség–Templom-domb.<sup>1726</sup>

Ecsedy devoted several studies to the metallurgy of the late Vučedol period and the technical aspects of metal production in his discussion of the crucibles and moulds period from Zók–Várhegy.<sup>1727</sup> The moulds used during this period were made from clay tempered with quartz sand and it seems likely that moulds were made after models carved from wood.<sup>1728</sup> The mould interior was coated with lime to prevent casting imperfections and facilitate the removal of the cast object from the mould. Patches of the lime coating survived in the mould from Döbrököz.

The few shaft-hole axes known from the Transdanubian distribution of the Somogyvár culture are mostly stray finds.<sup>1729</sup> A Kozarac type axe came to light at Nagyvejke–Réti szántók (*Pl. 47. 5*), whose analogies point toward the south, toward Bosnia-Herzegovina and Montenegro.<sup>1730</sup> The importance of this axe type lies in the fact that this is the single representative of this axe type in Transdanubia and the Carpathian Basin. The other shaft-hole axes from Transdanubia, which with the exception of the pieces from Dunakömlőd are stray finds, represent the Bányabükk, Fajsz and Kömlőd types.<sup>1731</sup> The use of various types and their variants suggests several local metalworking centres in Transdanubia. The axe from Nagyvejke can be assigned to the Early Bronze Age 2, the second period of shaft-hole axe production in Transdanubia. The cultural attribution of the Dunakömlőd hoard is uncertain.<sup>1732</sup>

<sup>1720</sup> Zók–Várhegy: Ecsedy (1982); *idem* (1983a); *idem* (1990). Vinkovci: Durman (1983) 23–38, T. 1. 1–3; Ljubljansko Barje: Durman (1983) T. 6. 7.

<sup>1721</sup> Pécs–Nagyárpád: Ecsedy (1982) 79, Fig. 45.

<sup>1722</sup> Ravazd: Figler (1985) 24; Kalicz-Schreiber (1991) 10.

<sup>1723</sup> A mould fragment for an axe was recovered from one of the settlement's pits: Ecsedy (1982) 79, Fig. 45; *idem* (1983a) 83, 90, Pl. IX. 5.

<sup>1724</sup> Three additional mould fragments also came to light on this settlement: Somogyi (2004) Figs 14–16.

<sup>1725</sup> Figler (1985) 24; Kalicz-Schreiber (1989); *idem* (1991) 10.

<sup>1726</sup> Gömöri (2002) 14.

<sup>1727</sup> Ecsedy (1983a) 72–85; *idem* (1990).

<sup>1728</sup> Ecsedy (1983a) 83; Bóna (1992b); Ecsedy (1994b).

<sup>1729</sup> Keszthely–Alsódobogó (Bányabükk type axe): Koppány–Péczeley–Sági (1962) 7, Fig. 3; MRT 1, 77, Site 21/8, Pl. 7. 13; Lickóvadás: Horváth (2001); Majs: Ecsedy (1983a) 79, Pl. IX. 4, Pl. XIV. 4; *idem* (1990) Fig. 11.

<sup>1730</sup> Kulcsár (1999b). The best analogies to the axe can be quoted from among variant 2 of the Kozarac type shaft-hole axes, such as the pieces from Griča and Vranovići: Žeravica (1993) 22–27, T. 7. 65–66, 72.

<sup>1731</sup> For a good overview, cp. Kovács (1996) 115–119.

<sup>1732</sup> Roska (1957).

Gold articles have to date only been recovered from the burial of the grave uncovered at Neusiedl am See, which yielded two gold lockrings,<sup>1733</sup> indicating the high status of the persons laid to rest under the mound. Several other burials from this period contained similar costume articles for signalling the high status of the deceased.<sup>1734</sup>

The cultural attribution of the gold finds from Orolik near Vinkovci is uncertain. Majnarić-Pandžić believed that the finds were the grave goods of a female burial from the early Vinkovci B1 period disturbed during the Celtic period, although she did not reject the possibility that the assemblage had been a hoard.<sup>1735</sup> The assemblage comprised a decorated gold disc, a pair of large and a pair of small spiral gold rings, twenty small gold spangles, six small gold rings, and a hundred and thirty-seven gold tubes. The gold disc can be assigned to the Stollhof–Csáford–Eszék type discs on typological grounds.<sup>1736</sup> However, the possible association of these discs with the Somogyvár–Vinkovci culture is uncertain despite the fact that a gold assemblage made up of similar articles as the ones brought to light at Orolik had been found in a Somogyvár–Vinkovci vessel at Gradina–Bosut (Bosutska Gradina or Batrovci–Gradina by Šid). Only a brief description of these finds is available.<sup>1737</sup> The Vinkovci vessel containing the gold finds lay in a pit. The gold assemblage was made up of a breast ornament (“Pektoralplatte”), seventy spangles, a lockring and wire fragments. The gold disc was less ornate than the one from Orolik and lacked bosses, and the gold lockring too was less elaborate than the piece from Orolik.

The issue can hardly be settled without the detailed publication of the Batrovci–Gradina assemblage. The discs have good parallels among the similar Middle Copper Age discs and they also share similarities with the gold discs and other gold articles from Óbéba–Pitvaros, dating from the onset of the Early Bronze Age, although finds from the cultures of the later Bronze Age can also be considered as possible parallels. The Orolik assemblage cannot be unambiguously assigned to the Somogyvár–Vinkovci culture<sup>1738</sup> and the information on the finds from Batrovci–Gradina is insufficient for a cultural attribution.

The cultural attribution of the two silver shaft-hole axes from Stari Jankovci, which reached a museum collection in 1880, is also uncertain: they were made sometime during the late Vučedol or the Somogyvár–Vinkovci period.<sup>1739</sup>

<sup>1733</sup> Pittioni (1954) Abb. 120–121; Bóna (1965a) Pl. XVIII. 15; Hahnel (1992) 86–87, note 33, Taf. 6. 4.

<sup>1734</sup> E.g. Sárretudvari–Órhalom, the tumulus burials of the Ampoița group, and the tumulus burials at Mala Gruda and Velika Gruda. Cp. Ciugudean (1991); *idem* (1996); Primas (1996).

<sup>1735</sup> Although these finds did not come to light during a professional excavation, they have nonetheless been assigned to the Somogyvár–Vinkovci culture: Majnarić-Pandžić (1974) 26; Tasić (1984) 22, Abb. 1; Machnik (1991a) 144, 146, Fig. 30.

<sup>1736</sup> Tasić (1984) 22; Machnik (1991a) 144, 146.

<sup>1737</sup> Tasić (1984) 22–23; Machnik (1991a) 146.

<sup>1738</sup> Cp. Glogović (2003).

<sup>1739</sup> Balen–Mihelić (2003). A Somogyvár–Vinkovci settlement has been identified on the outskirts of Stari Jankovci (272) and two jugs are also known from the area.



### *Cultural connections of the Transdanubian Somogyvár–Vinkovci culture as reflected by the pottery and other finds*

Parallels to the material from the Transdanubian sites of the Somogyvár–Vinkovci culture can be found across a broad cultural spectrum. The best analogies can obviously be quoted from the Vinkovci culture in Slavonia and the Srem, and the Belotić–Bela Crkva burials south of the Sava, despite the differences in the typological composition of artefact types. Connections with the east can be documented through the Ada group, the Roşia group, the Jigodin and Soimuş groups of Transylvania, and the Glina III–Schneckenberg/Năeni complex. The traditions of the preceding Vučedol culture can be noted in several instances: in addition to the new artefact types appearing with the Somogyvár–Vinkovci culture, several types can be derived from the earlier Vučedol culture. The Rudina group of north-eastern Croatia and the Laibach/Ljubljana culture in the Ljubljana area represent a separate trajectory of post-Vučedol development. The connections with these groups meant the continuation of the Vučedol traditions and the survival of the Vučedol culture's network of cultural contacts. The repertory of new Somogyvár–Vinkovci forms had a lasting impact on the Makó–Kosihy–Čaka and the Moravian Corded Ware cultures.<sup>1740</sup> The influence of Somogyvár–Vinkovci pottery types, and especially of the handled jugs, can be demonstrated in the early Nagyrév culture and the Budapest group of the Bell Beaker culture.<sup>1741</sup>

A new style with a new repertory of vessel shapes made its appearance at the close of the Vučedol period. This should not be conceptualised as a profound change, but rather as a continuous transformation (a gradual change of style), reflected also in the composition of ceramic types: while new elements made their appearance, several earlier used artefact types were modified or transformed to some extent. The Somogyvár–Vinkovci culture and its cultural connections preserves the imprint of a period in flux: the cultural parallels to the various artefact types span a fairly long period of time (Early Bronze Age 1–2 and beginning of 3) and a broad geographic region, from Slovenia to Oltenia and from Moravia to the Central Balkans.<sup>1742</sup> While the growing number of find assemblages certainly contributes to creating a precise chronology of the period, at present there are more uncertainties than secure anchors in determining the internal chronology and span of the Somogyvár–Vinkovci sequence.

The Somogyvár culture of Transdanubia was bound to the Zók–Vučedol culture by many strands, explaining the many typological similarities between the ceramics of the two cultures: small conical bowls, interior decorated bowls, wide-mouthed handled jugs, pots, amphoras, bowls and some of the small mugs can be derived from the classical/late Vučedol ceramics.<sup>1743</sup>

The culture also shares numerous similarities with the Ljubljana/Laibach area. Whilst contacts with south-western and western Transdanubia were more dynamic, cultural impacts can also be demonstrated in the south-eastern territories too. The rhythm of change after the late Vučedol period was more or less similar in the Slovenian and southern Transdanubian territories. Variants of the mugs with long curved neck (Type I/12) have been found on the Ig settlement;<sup>1744</sup> the decorated

<sup>1740</sup> For a more detailed discussion of the contacts with the Makó–Kosihy–Čaka culture, cp. pp. 173. See also *Buchvaldek* (2002); *Bertemes–Heyd* (2007); *Heyd* (2007).

<sup>1741</sup> *Kalicz–Schreiber–Kalicz* (1997); *idem* (1999); *idem* (2000).

<sup>1742</sup> Connections with more distant regions in the south, the Balkans, the Adriatic and the Aegean, are not discussed here. For an earlier overview, cp. *Bóna* (1965a); for a more recent one, based also on new radiocarbon dates and typological analyses, cp. *Govedarica* (1997); *Maran* (1998); *Nikolova* (1999).

<sup>1743</sup> *Dimitrijević* (1982a); *idem* (1982b).

<sup>1744</sup> *Korošec–Korošec* (1969) T. 12. 10, T. 29. 4–5, 8.



forerunner of the biconical jugs with cylindrical neck (Types II/1–2) appeared in the late Vučedol period,<sup>1745</sup> as did their plain variant.<sup>1746</sup> The best analogies to the different variants of two-handled jugs with cylindrical neck (Types III/6–7)<sup>1747</sup> and the lozenge pattern on the shoulder and handle of the tall-necked mug from the Neusiedl am See burial can be cited from the material of the Ig settlement.<sup>1748</sup> Matching pieces to the one-handled small pots,<sup>1749</sup> pots with folded out rim, plain conical bowls (Types VIII/3–4) and bowls decorated with incised zig-zag lines (Type VIII/6)<sup>1750</sup> can likewise be found in the settlement's ceramic inventory. In contrast, flask and large amphoras with cylindrical neck are entirely lacking.

There is a general consensus that the Somogyvár culture of Transdanubia was part of the same cultural complex as the Vinkovci group distributed south of the Drava. Notwithstanding the many similarities in the composition of the pottery types in the relatively few assemblages published from the Vinkovci distribution in Slavonia and the Srem, such as the presence of certain jug types, flasks and amphoras (*Figs 69–70*), several differences can also be noted in addition to the different proportions of certain vessel types: different mug, jug, bowl and pot types seem to have been popular, the use of vessel with asymmetrical handles was more frequent, while interior decorated bowls are very rare.

The Vinkovci culture had a predilection for mugs with flaring neck and conical shoulder and a wide strap handle set on the neck (*Fig. 69. 1–2*).<sup>1751</sup> The other popular mug type was biconical with a low cylindrical neck (*Fig. 69. 3–5*).<sup>1752</sup> The latter vessel type was used by the Rudina group too.<sup>1753</sup> These mugs are close to the vessels described under Type I/8 and Types I/10–11 of the Transdanubian material.

Wide-mouthed biconical jugs (Type II/5) are also encountered in the southern territories,<sup>1754</sup> as are plain wide-mouthed jugs with rounded shoulder (*Fig. 69. 12–14*).<sup>1755</sup>

Jugs with narrow cylindrical neck and curved conical shoulder are a frequent type among Vinkovci jugs<sup>1756</sup> and the vessels with asymmetrical handles often come in a similar shape (*Fig. 69. 8–11*).<sup>1757</sup> In Transdanubia, however, this jug type is infrequent (Type II/6, represented by pieces from Pécs–Nagyárpád and Somogyvár–Kupavárhegy). Jugs with asymmetrical handles (Type XX) are extremely rare finds in Transdanubia (Szava). Vessels matching the jugs from the Srem are known from the settlements such as Tolna–Mözs (*Pl. 51. 2*), which can be associated with the so-called proto-Nagyrev process. Interestingly enough, the basic jug shape and its squatter variant with asymmetrical handles crop up much farther, in the Makó–Kosihy–Čaka burials in the northern part of the Great Hungarian Plain and southern Slovakia (MKČ Type II).

The ceramic inventory from Slavonia and the Srem does not include mugs and jugs with tall curved neck (Types I/12–16, Types II/7–8) or their decorated variants and their variants with divided

<sup>1745</sup> Korošec–Korošec (1969) T. 13. 1, 3–4, T. 17. 1, 2, 5.

<sup>1746</sup> *Ibidem* T. 17. 4, 6, T. 18. 2–4, T. 22–25.

<sup>1747</sup> *Ibidem* T. 14. 2; Bóna (1965a) Pl. XVII. 1.

<sup>1748</sup> Korošec–Korošec (1969) T. 17. 1–2, T. 19. 1.

<sup>1749</sup> *Ibidem* T. 21. 1.

<sup>1750</sup> *Ibidem* T. 29. 17, T. 68.

<sup>1751</sup> Vinkovci: Dimitrijević (1982a) T. 4. 1–2, 5, 7, T. 5. 2–3, T. 6. 7–8, Abb. 5.

<sup>1752</sup> Opatovac: Dimitrijević (1956a) T. III. 21–22; Stari Jankovci: *ibidem* T. V. 32–33.

<sup>1753</sup> Koprivnička–Rijeka: Marković (1981) T. 12. 1; Tasić (1984) Taf. II. 1.

<sup>1754</sup> Batrovci–Gradina: *ibidem* Taf. III. 2.

<sup>1755</sup> Batrovci–Gradina. *ibidem* Taf. III. 1.

<sup>1756</sup> Batrovci–Gradina: *ibidem* Taf. II. 14, Taf. IV. 8.

<sup>1757</sup> Vinkovci: Dimitrijević (1982a) T. 4. 9, T. 6. 5; Tasić (1984) Taf. IV. 3; Ilok: *ibidem* Taf. I. 4.



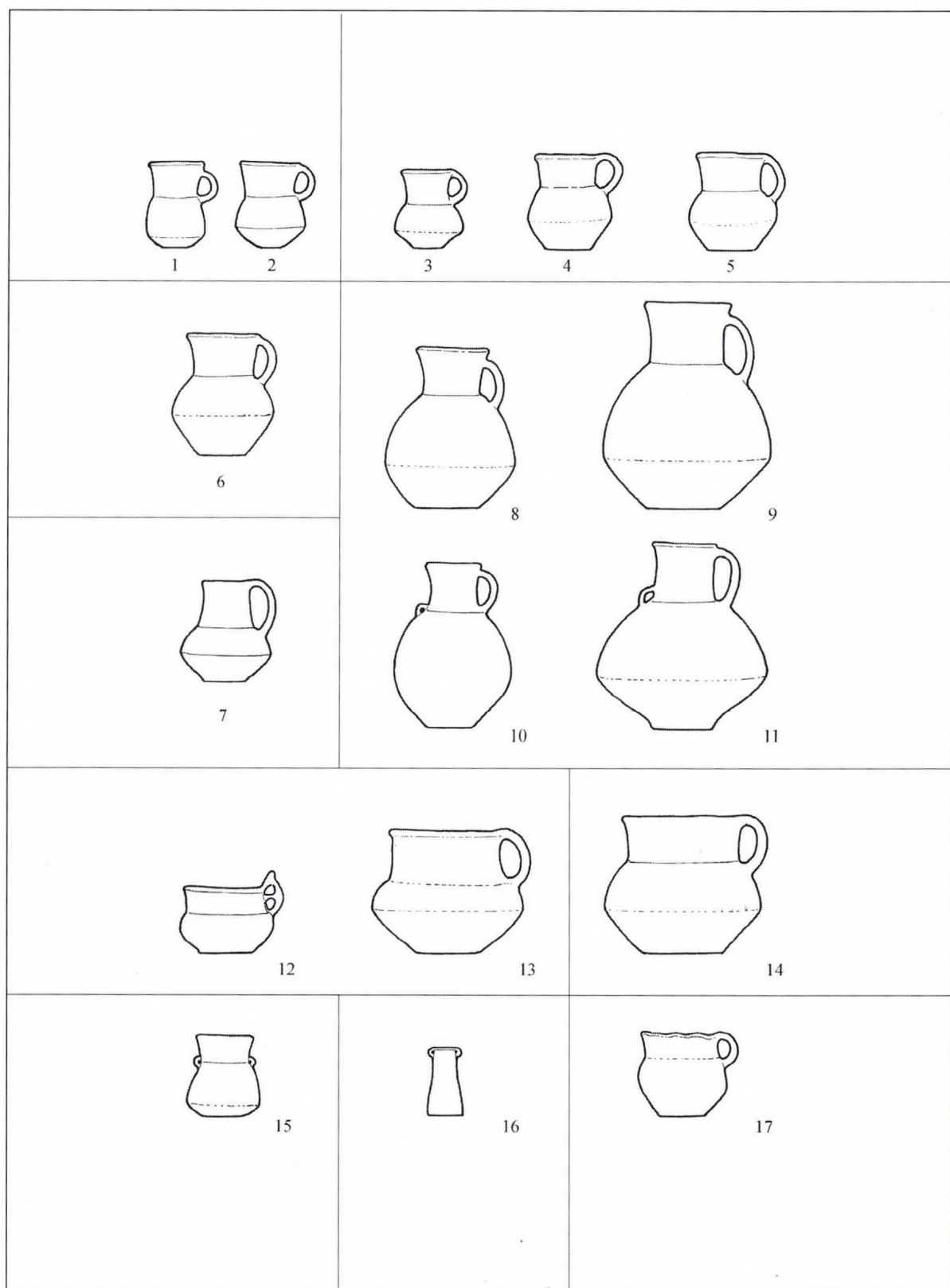


Fig. 69. Vessel types of the Somogyvár–Vinkovci culture in the Srem and Slavonia  
(after Dimitrijević [1966] and Tasić [1984])

handle.<sup>1758</sup> Handled biconical jugs with cylindrical neck (Types II/1–2), another prominent type in the Transdanubian material, occur much less frequently and in a different form (*Fig. 69. 6–7*).<sup>1759</sup>

The long, tall variant of flasks (Type VI/2) was most widespread in the Srem (*Fig. 69. 16*).<sup>1760</sup>

Bowls include several types not encountered in the Transdanubian material, such as wide-mouthed deep bowls,<sup>1761</sup> bowls with an incised herringbone pattern,<sup>1762</sup> and shallow bowls with a strongly outturned rim.<sup>1763</sup> Although pieces resembling bowls of Type VII/13 in the Transdanubian material do occur,<sup>1764</sup> most of the Transdanubian bowl types are lacking from the Vinkovci ceramic repertoire (*Fig. 70. 1–5*).

While the forerunners of the one-handled small pots with pinched decoration (Type X/5) are known from the late Vučedol (Vučedol B2–C) period, their later use has not been documented in the Drava–Sava Interfluvium,<sup>1765</sup> even though they have been found in more northerly regions, at Pécs–Nagyárpád, Somogyvár–Kupavárhegy and Kaposújlak–Várdomb, all settlements occupied during the late Vučedol and early Somogyvár period.

Whilst vessels resembling two-handled pots are known from the Vinkovci distribution, a piece from Ilok has the handles on the belly (*Fig. 70. 11*);<sup>1766</sup> the handles are set on the shoulder on a vessel from Nagyárpád (Type XI/4). A flatter variant with a wider mouth resembling a vessel from Nagykanizsa–Sánc (Type XII/3) can be quoted from among the two-handled dishes (*Fig. 70. 9*).<sup>1767</sup> A few types used in both the Somogyvár and the Vinkovci distribution can be distinguished among the small pots (Types XIV/1–2; cp. *Fig. 70. 10*).<sup>1768</sup> A much greater similarity can be noted in the amphora types preferred in the two distributions. All three amphora types known from the Vrđnik–Péćine settlement can be found in Transdanubia (Type XV/3; cp. *Fig. 70. 13–15*). The type with more elongated body seems to have been popular in both groups. The rib decorated amphora type of the Vrđnik settlement<sup>1769</sup> also occurs in the ceramic inventory of the central Transylvanian Soimus group.<sup>1770</sup>

The single parallel to the vessel open at both ends (Type XVII) comes from the Srem. An artefact with a different shape, but a presumably similar function came to light on the Batrovci–Gradina settlement (*Fig. 70. 16*).<sup>1771</sup>

This brief overview clearly shows that despite the many similarities in the ceramic inventory of the Early Bronze Age groups populating Transdanubia and the population living in Slavonia and the Srem, several major differences can be noted too. While a strong relation between the two cannot be rejected out of hand, a meaningful discussion of this issue calls for well-documented assemblages

<sup>1758</sup> The divided handle appears on a small wide-mouthed vessel at Ilok: *Tasić* (1984) Taf. I. 3.

<sup>1759</sup> Vinkovci: *ibidem* Taf. IV. 11; Ilok: *ibidem* Taf. II. 10.

<sup>1760</sup> Batrovci–Gradina: *Tasić* (1968) Abb. 7; Vinkovci: *Dimitrijević* (1982a) T. 4. 3–4, T. 6. 6, Abb. 5. 17; Ilok: *Tasić* (1984) Taf. II. 5, 9.

<sup>1761</sup> Vinkovci: *Dimitrijević* (1982a) T. 5. 5.

<sup>1762</sup> Vinkovci: *Tasić* (1984) Taf. IV. 9, 13.

<sup>1763</sup> Vinkovci: *ibidem* Taf. IV. 4–6; Drljanovac: *Majnarić-Pandžić* (1981) Fig. 2.

<sup>1764</sup> Ilok: *Tasić* (1984) Taf. I. 1–2.

<sup>1765</sup> Vinkovci: *Dimitrijević* (1982a) T. 2. 2.

<sup>1766</sup> *Tasić* (1984) Taf. I. 5.

<sup>1767</sup> Ilok: *ibidem* Taf. II. 13.

<sup>1768</sup> Ilok: *ibidem* Taf. I. 8.

<sup>1769</sup> *Ibidem* Taf. IV. 2.

<sup>1770</sup> This group shares numerous similarities with the Schneckenberg and the Roşia groups of the Early Bronze Age 2. Cp. *Ciugudean* (1996) Fig. 58. 8, Fig. 65. 1, 2.

<sup>1771</sup> Batrovci–Gradina: *Tasić* (1984) Taf. III. 6.



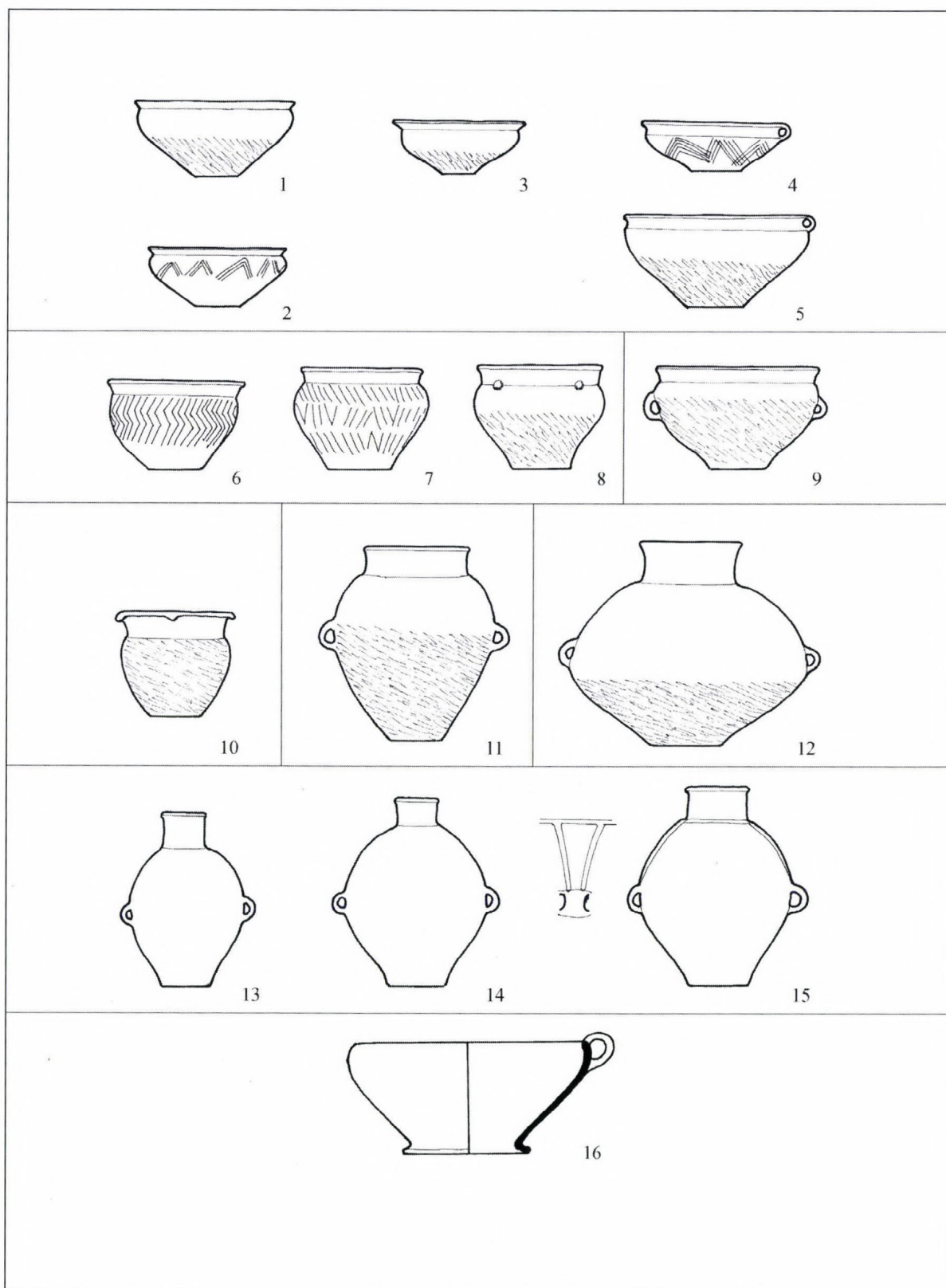


Fig. 70. Vessel types of the Somogyvár-Vinkovci culture in the Srem and Slavonia  
(after *Dimitrijević* [1966] and *Tasić* [1984])

from stratified contexts and the full publication of the finds and findings of the larger settlements such as Batrovci–Gradina, Ilok and Vrđnik.<sup>1772</sup>

The biconical jugs with cylindrical neck (Types II/1–2) and their two-handled variants (Type III/3) are matched by the similar vessels from the tumulus burials investigated at Priboj, Zabari, Markovica and Negrišori.<sup>1773</sup>

The material of the so-called Somogyvár–Ada group in the southern part of the Danube–Tisza Interfluvium and along the right bank of the Tisza (earlier described as the Ada group) is predominantly made up of stray finds.<sup>1774</sup> The most typical vessel type of the group's ceramic inventory is the jug with tall curved neck, such as the ones from Algyő and Ásotthalom–Borgazdaság, and their variant with divided handle, such as the pieces from Ada and Radanovac, whose best parallels can be quoted from Pécs–Nagyárpád and Szava (Types II/7, II/7d, II/8, II/8b). Other analogies to the group's handled jugs and mugs<sup>1775</sup> can be quoted from the Somogyvár–Vinkovci distribution both in Slavonia and the Srem,<sup>1776</sup> and in southern Transdanubia.<sup>1777</sup> Good counterparts to the jug with asymmetrical handles from Hajdukovo<sup>1778</sup> are known from Slavonia and the Srem,<sup>1779</sup> as well as from the Gyula–Roşia group.<sup>1780</sup> The interior decorated footed bowl from Senta<sup>1781</sup> is one of the most carelessly made bowls, suggesting a late date for it exactly because it is obviously a copy of more finely made pieces. The above assemblages indicate that the Somogyvár–Ada group was a blend of elements from Slavonia and the Srem, as well as from the Danube region and southern Baranya. While it is difficult to establish which of these groups played a more decisive role, the limited distribution of vessels with divided handle would suggest that the cultural impacts from southern Baranya were the strongest. It must also be noted that the many similarities notwithstanding, the lack of flasks and jugs is striking because these vessels were a hallmark of this period.

Contact between the Roşia group (earlier called Gyula–Roşia group)<sup>1782</sup> and the Transdanubian material is first and foremost reflected in the use of mugs and jugs with curved neck (Type I/12, Type II/7).<sup>1783</sup> Again, there are a few dissimilarities in addition to the similarities, such as the occurrence of vessels with asymmetrical handles and the variants with conical shoulder of jugs with cylindrical neck in the caves along the Körös Rivers.<sup>1784</sup> Both of these vessel types are rare finds in Transdanubia, but occur frequently in the Srem. Flasks are lacking from the ceramic repertoire of the Roşia group too; at the same time, several independent mug and pot variants appear in addition to the basic pottery types.<sup>1785</sup>

<sup>1772</sup> The finds from these settlements differ slightly from the usual Vinkovci types and suggest the existence of a separate style along the Danube. This style can probably be linked to the emergence of the proto-Nagyér type along the Danube, which can be traced up to Dunaföldvár (Bóna [1992a] 14; Szabó [1992]), and the Budapest area: Kalicz–Schreiber–Kalicz (1999) 87, note 13.

<sup>1773</sup> Bóna (1965a) 44–48.

<sup>1774</sup> Horváth (1984a). For recent discussions of this group, cp. Bóna (1992a); V. Szabó (1999); Kulcsár (2000); Tóth (2003).

<sup>1775</sup> Radanovac: Horváth (1984a) T. II. 1; Hajdukovo: *ibidem* T. III. 2; Sombor: *ibidem* T. VI. 2.

<sup>1776</sup> Batrovci–Gradina: Tasić (1984) Taf. III. 1; Vinkovci: Dimitrijević (1982a) T. 5. 4.

<sup>1777</sup> Pécs–Nagyárpád: Bándi (1981) T. 4. 8, and SV Type II/9a, Type II/10a.

<sup>1778</sup> Hajdukovo: Horváth (1984a) T. III. 1, T. IV. 1.

<sup>1779</sup> Vinkovci: Tasić (1984) Taf. IV. 3.

<sup>1780</sup> Gálășeni/Gálosháza: Emődi (1985) Fig. 5. 33.

<sup>1781</sup> Horváth (1984a) Tab. VI. 3–4.

<sup>1782</sup> Bóna (1965a) 46; Emődi–Halasi (1985); Bóna (1992a) 14.

<sup>1783</sup> Emődi (1985) Fig. 5. 30, 42, Fig. 8. 3; Emődi–Halasi (1985) Fig. 6a.

<sup>1784</sup> Emődi (1985) Fig. 5. 33–36.

<sup>1785</sup> Molnár–Ghemis (2003) Pl. 9.



Contact with the Glina III–Schneckenberg culture is evidenced by the use of certain vessel types, such as mugs with tall curved neck (Type I/12)<sup>1786</sup> and their decorated variant.<sup>1787</sup> Pieces resembling mugs of Type I/11 are also encountered.<sup>1788</sup> The appearance of animal figurines<sup>1789</sup> and a wagon model<sup>1790</sup> in this milieu must also be borne in mind. It seems likely that the use of mugs with tall, curved neck in central and south-eastern Transylvania, for example in the Soimuş group,<sup>1791</sup> can be traced to the influence of the Transylvanian Schneckenberg group.

The pottery of the Somogyvár–Vinkovci culture shares a few similarities with the vessels of the Jigodin culture, which was closely allied to the Schneckenberg group. The greatest resemblance can be noted between the small mugs and the handled mugs with tall, curved neck (Type I/12, cp. Leliceni/Csíkszentlélek–Muntele).<sup>1792</sup> An even greater degree of similarity can be seen regarding the small finds, such as wheel models<sup>1793</sup> and clay amulets,<sup>1794</sup> as well as in the continuation of the same metalworking traditions.<sup>1795</sup>

\* \* \*

The ceramic repertoire of the Transdanubian Somogyvár group thus blends different traditions. The cultural substratum in the vast region extending from the Alpine foreland to the Danube and from the Drava to the southern shores of Lake Balaton was the late Vučedol culture.

The currently available evidence indicates that the regional differences outlined earlier<sup>1796</sup> can be supplemented with the following observations:

(1) In south-eastern Transdanubia, the southern Baranya type is the most typical in terms of ceramic wares (vessels with divided handle and wide-mouthed jugs with cylindrical neck) and their decoration (channelling on bowls, mugs and jugs). This type was distributed up to the Somogyvár–Kupavárhegy settlement, suggesting that the spread of this style can be associated with the preceding rather intensive Vučedol settlement area. The find assemblages from this area are characterised by a relatively high number of interior decorated footed bowls which can essentially be regarded as imitations of the similar late Vučedol bowls.

(2) Another group can be distinguished in south-western Transdanubia, represented by the settlements at Börzönce, Nagykanizsa–Sánc, Nagykanizsa–Inkey kápolna and Letenye–Szentkeresztomb. The pottery of this group was rarely ornamented and the interior decorated bowls tend to be simpler, with less elaborate patterns. Very few artefact types can be derived from the types widespread during the Vučedol period.

(3) In western Transdanubia and the Alpine foreland, the impact of the Ljubljana/Laibach culture and the Rudina type resulted in the joint presence of early Somogyvár–Vinkovci elements and late Vučedol jugs with excised patterns, as well as interior decorated bowls. This region does not appear to have been intensively settled (Szombathely area, Csepreg and Sé).

<sup>1786</sup> Machnik (1985) Abb. 2. 2–3.

<sup>1787</sup> *Ibidem* Abb. 3. 5.

<sup>1788</sup> Machnik (1985) Abb. 3. 4; Schuster (1997) Fig. 145. 1–2.

<sup>1789</sup> Machnik (1985) Abb. 5. 8–9.

<sup>1790</sup> *Ibidem* Abb. 5. 4.

<sup>1791</sup> Zlatna/Zalatna: Ciugudean (1996) Fig. 64. 1–2, 6.

<sup>1792</sup> Roman–Dodd–Oprişescu–János (1992) Taf. 90. 1, 3.

<sup>1793</sup> Leliceni/Csíkszentlélek–Muntele: *ibidem* Taf. 137. 1–4.

<sup>1794</sup> Leliceni/Csíkszentlélek–Muntele: *ibidem* Taf. 136. 2–6.

<sup>1795</sup> Leliceni/Csíkszentlélek–Muntele: *ibidem* Taf. V, Taf. 78, Taf. 79. 2, 5–8.

<sup>1796</sup> Kalicz–Schreiber (1989); Bondár (1995).

(4) The Somogyvár pottery from north-western Transdanubia is restricted to a few types, such as amphoras, small mugs and jugs with cylindrical neck, and flasks, pots. The most controversial finds are the handled cups, regarded as a variant of two-handled flasks. Aside for southern Baranya, cups of this type are encountered in greater number among the grave goods of the burials in the Little Hungarian Plain and Austria (Kajárpéc–Pokolfadomb, Schwechat–Brauerei).

(5) Small handled mugs and jugs with tall cylindrical neck occur sporadically in north-eastern Transdanubia. Interestingly enough, small vessels no more than 5–6 cm high imitating handled pots appear among the grave goods of Makó–Kosihy–Čaka burials, as at Tata and Látatlan. These vessels can be tentatively linked to the Makó–Kosihy–Čaka culture. The clarification of contacts with the Bell Beaker–Csepel group in the Budapest area will contribute to a better understanding of the cultural contacts along the Danube

The publication and assessment of the find assemblages from the large-scale excavations conducted more recently in Transdanubia and the Budapest area will no doubt modify to some extent the broad picture presented in the above.



## AFTERWORD

A few general points can be formulated regarding the start of Bronze Age development in the central regions of the Carpathian Basin in the mid-3rd millennium BC. The cultural trajectories of the Early Bronze Age 1–2 cannot be subdivided into markedly separate phases exactly because of the constantly changing nature of the period in question and the low number of chronologically secure find assemblages.

Life continued on the late Vučedol settlements in southern Transdanubia, Slavonia and the Srem at the onset of the Early Bronze Age (Early Bronze Age 1a). The first communities with a southern (predominantly Vučedol) ancestry, which later developed into the Makó–Kosihy–Čaka culture, appeared in the southern part of the Great Hungarian Plain and along the Tisza, advancing as far as the Érmellék region and the greater part of the culture's later distribution. The exact process leading to the eventual emergence of the Makó–Kosihy–Čaka culture cannot be reconstructed as yet because there are no reliable archaeological criteria for distinguishing early Makó sites from later ones. What seems certain nonetheless is that the culture drew from many cultural sources during its formation.

Several problems of the early Makó–Kosihy–Čaka period still need to be addressed. It has been repeatedly noted in the above that the current archaeological record is largely unsuitable for clarifying the culture's early connections and especially for probing questions of origins and formation. While I have attempted to identify the artefact types and phenomena typical for the culture's early and late period, I am fully aware that this is no more than a starting point of future research, rather than a final conclusion.

The Makó–Kosihy–Čaka culture was preceded by the Baden culture in the greater part of the Carpathian Basin.<sup>1797</sup> No direct links can at present be demonstrated between the material culture and settlement patterns of these two cultures. The separation of the late Baden phase too raises several issues in Late Copper Age studies. The role possibly played by the Kostolac and Coțofeni groups of the Late Copper Age in the culture's formation is equally uncertain.<sup>1798</sup> One of the most intriguing issues in this field of research is the appearance of eastern steppean groups in the Great Hungarian Plain.

It has been suggested that the Yamnaya communities of steppean ancestry settling in eastern Hungary, which buried their dead under kurgans, survived until the Early Bronze Age and that the continuous infiltration of Yamnaya groups can be assumed until the onset of the late Baden/Makó/Somogyvár/Glina III/Nyírség period.<sup>1799</sup> Kalicz recently argued for a late Baden/Kostolac date for the majority of these kurgans.<sup>1800</sup> The research of this period received a new impetus with the excavation of the burials under the Órhalom kurgan by Sárrétudvari. The radiocarbon dates indicated that the earliest burials could be dated to the close of the 4th millennium, while the latest to mid-3rd millennium BC.<sup>1801</sup> The kurgan's investigation suggested that the successive waves of Yamnaya and, later, Catacomb groups arriving to eastern Hungary from the Late Copper Age onward survived to see the emergence of the Makó culture and that the communities of the two cultures perhaps lived side by side for some time afterward. The duration of this co-existence is not known, and neither is

<sup>1797</sup> For a good overview of research on Baden culture, cp. *Bondár* (2002b), with a mention of 1664 Baden sites.

<sup>1798</sup> *Bondár* (1984) 76, 81; *Dani* (2005c).

<sup>1799</sup> *Ecsedy* (1975a); *idem* (1975b); *idem* (1979a) 50–52; *idem* (1979b); *idem* (1982) Fig. 1; *idem* (1983b); *Kalicz* (1984a) 102. Cp. also *Kalicz* (1989); *Dergačev* (1998); *Kalicz* (1998b).

<sup>1800</sup> *Ibidem* 173–178.

<sup>1801</sup> *Dani–M. Nepper* (2006): Grave 12: 3346–3309 BC (1σ), 3234–3115 BC (2σ); Grave 10: 3004–2960 BC (1σ), 2949–2908 BC (2σ); Grave 4: 2859–2801 BC (1σ), 2760–2620 BC (2σ); Grave 9: 2637–2489 BC.



there any evidence for the possible interaction between the Yamnaya and the Makó cultures or for the cultural impact of the Yamnaya groups on the Makó material of the culture. Another equally important issue is how these eastern groups integrated into the local milieu, seeing that not one single independent Yamnaya settlement has yet been found.<sup>1802</sup> It is possible that the eastern groups blended into the local population and that for some, as yet unknown reason, they played a prominent role in these mixed communities, reflected by the “prestige” tumulus burials.<sup>1803</sup> This interpretation is supported by the grave goods of the late burials (Graves 4, 7, 7a, 9) under the Sárrétudvari kurgan. The analogies to the metalwork and the pottery suggest that the burial site represented an integration point in the vast territory extending from the eastern steppe through Transylvania and eastern Hungary to central Germany in the mid-3rd millennium BC.<sup>1804</sup>

The second half of the Early Bronze Age 1 saw the start of a new transformation on the late Vučedol settlements in Slavonia, the Srem and southern Transdanubia, leading to the emergence of the Somogyvár–Vinkovci culture. The late Vučedol settlements were gradually abandoned and their former occupants established independent, less well organised settlements in Slavonia, the Srem and southern Transdanubia. At the same time, the intensive contact between the south, now populated by Somogyvár–Vinkovci communities, and the Makó–Kosihy–Čaka territories continued. It seems likely that the first early Nyírség elements appeared in eastern Hungary at this time.

The beginning of the Vučedol sequence can be correlated with the Early Helladic I–II phase, indicating that a roughly similar, parallel development can be reconstructed for the Aegean and the Balkans in the first half of the 3rd millennium BC (tell settlements, metallurgy).<sup>1805</sup> The major changes sweeping through the Lower Danube region, Slavonia, the Srem and the southerly areas of the Carpathian Basin at the close of the late Vučedol period (EH II) were stimulated by developments in the central and eastern, Macedonian and Thessalian regions of the Balkans. The origins of these changes are still unclear for the greater part. Models invoking population movements are supported by the spread of a similar ceramic style and the funerary practice of burying the deceased under mounds across an extensive geographic region. However, cultural interaction no doubt played an equally important role as actual migrations and thus models combining the two probably provide a more adequate explanation for the perceptible changes observed in the Lower Danube region, Transdanubia, the southern part of the Great Hungarian Plain and the Balkans. The gradual simplification of late Vučedol pottery forms in the ceramic inventory of the Somogyvár–Vinkovci culture too reflects a gradual, rather than an abrupt change. The appearance of the Glina III–Schneckenberg culture in Wallachia and Oltenia can be seen as the eastern branch of this cultural process.

<sup>1802</sup> The first grave under the Órhalom mound at Sárrétudvari contained a burial in which the deceased was not deposited according to the classical Yamnaya rite (Grave 12: *Dani–M. Nepper* [2006] Fig. 8. 2), suggesting that the deceased had been part of a community which had adapted to the local conditions.

<sup>1803</sup> Several prestige burials of this type with the deceased laid to rest in a crouched position under a mound are known from the Early Bronze Age. In these cases, the prestige status was accorded not only to the deceased, but also to the site of the burial, which lay along major routes, important river crossings, in bays, or at the meeting point of two cultural units (e.g. Belotić–Bela Crkva; Rajka and Gönyű along the northern and Verbița in the southern section of the Danube Valley, the burial mounds in Montenegro and eastern Slovakia, and the sites by the central Transylvanian copper and salt deposits; Ampoița, Livezile group). The grave goods from these burials generally represent the artefact types of the local cultural unit. The graves in the Tisza region of eastern Hungary stand out in this respect because the pottery and metal artefacts deposited in the burial, which was set apart from the other contemporary graves for ethnic or prestige reasons, differ from the material of the local population.

<sup>1804</sup> *Dani–M. Nepper* (2006); *Harrison–Heyd* (2007); *Maran* (2008). Cp. *Rassamakin–Nikolova* (2008).

<sup>1805</sup> *Maran* (1987); *Govedarica* (1989a); *Maran* (1989); *Ecsedy* (1994a) 17; *Maran* (1998) 314–315, 347–354; Taf. 82.



During the Early Bronze Age 2, Somogyvár–Vinkovci groups advancing northward reached the Danube and ousted the Makó–Kosihy–Čaka culture from this region. Artefacts of southern origin appear in the Makó–Kosihy–Čaka burials in northern Transdanubia, south-western Slovakia and the northern part of the Great Hungarian Plain. These finds can be assigned to the culture's late phase, suggesting that it survived to see the arrival of the Bell Beaker culture to the Budapest area. The Makó–Kosihy–Čaka culture retreated to the right bank of the Tisza; the region on the river's opposite bank was settled by the Nyírség culture by this time.

The Somogyvár–Vinkovci distribution attained its greatest extent at the onset of the Early Bronze Age 2. A host of smaller groups with a similar range of pottery wares, related to the Somogyvár–Vinkovci complex, appeared along the Danube (proto-Nagyrév), the southern part of the Danube–Tisza Interfluvium (Ada group), along the Maros and Körös Rivers, where they blended with the Makó substratum, and eventually advanced as far as the caves along the Körös Rivers (Roşia group).

Smaller regional groups can be distinguished on the testimony of the pottery styles during the Somogyvár–Vinkovci development. A decorated variant appears in the southern part of Baranya County (Szava); the south-west Hungarian sites are closely allied to the north-western Croatian and Slovenian sites, while the northern Transdanubian find assemblages differ slightly from the material of southern and south-western Transdanubia. Several differences can be noted between the finds from the Drava–Sava Interfluvium and those from southern Baranya. These can be interpreted as regional variants because no major chronological differences can be discerned between them. The beginning of the Early Bronze Age 3 saw the late, proto-Kisapostag development of the Somogyvár–Vinkovci culture south of Lake Balaton. The emergence of the Nagyrév culture from the proto-Nagyrév branch along the Danube marked a new chapter in the Bronze Age history of the Carpathian Basin.





## CATALOGUE II

### SITES OF THE SOMOGYVÁR–VINKOVCI CULTURE

(Figs 39–43)

Hungary (cat. nos 1–254)

Austria (cat. nos 255–256)

Croatia (cat. nos 257–279)

Serbia (cat. nos 280–290)

Slovenia (cat. nos 291–293)

Belotić–Bela Crkva / Žabari–Markovica–Priboj group (cat. nos 294–303)

Somogyvár–Ada group (cat. nos 304–314)

The asterisk (\*) indicates sites where interior decorated bowls have been found.

#### Hungary (cat. nos 1–254)

##### 1. Ajka–Erőmű–Homokbánya (County Veszprém)

Settlement and burial (?).

Unstratified find (1955) and field survey (1955).

The large amphora (H. 72 cm) found in 1955 suggested a burial of the Somogyvár–Vinkovci culture (MRT 3, 23, Site 2/3, Pl. 2. 1; *Bondár* [1995] 250); according to István Bóna, however, it was not a grave find (*Bóna* [1972] 6).

Pottery fragments found during the field survey indicated a settlement site.

MRT 3, 23, Site 2/3, Pl. 2. 1; *Bóna* (1965a) 41, Pl. XIII. 1; *Ecsedy* (1979a) 105; *Bondár* (1995) 250.

##### \*2. Alsónyék–Lajvér-puszt (Gubaci-hegy) (County Tolna)

Settlement (fortified ?).

Field survey and aerial site survey (Gyula Nováki, Zsuzsa Miklós).

The heavily disturbed settlement covers a ca. 500 m x 150 m large area. Settlement defended by a ditch and rampart; however the date of the enclosure is uncertain.

Fragments of an interior decorated bowl and other pottery fragments from the Early Bronze Age.

*Miklós* (2007) 27–29.

##### 3. Ádánd (County Somogy)

Settlement.

Field survey (István Torma, 1979).

RRM Archaeological Archives.

##### 4. Bak–Rózsa Street (County Zala)

Settlement.

Small-scale rescue excavation (László Vándor, 1974).

“Pottery fragments of the Zók culture” were quoted. Unpublished.

*Vándor* (1975).

##### 5. Baksa–Kopárdűlő (County Baranya)

Settlement.

Vessel fragments from the Early Bronze Age. HNM inv. no. 134.1880.3–4. Unpublished.

*Bándi* (1979) 70; *Bondár* (1995) 250.

##### 6. Balatonberény (County Somogy)

Stray finds.

Handled mug and characteristic bowl and pot rim fragments.

*Bóna* (1963) 13, Pl. VIII. 10. RRM inv. no. 73.145. 1–2, 5, 7, 11–12.

- 7. Balatonboglár–Eastern bank of Forró árok (County Somogy)**  
 Settlement.  
 Field survey.  
 Vessel fragments from the Early Bronze Age.  
 RRM Archaeological Archives.
- 8. Balatonboglár–Kokashegy (County Somogy)**  
 Settlement.  
 Field survey (M7 Motorway, 1993).  
 A few body fragments from the Early Bronze Age.  
 RRM Archaeological Archives.
- 9. Balatonhídvégpuszta (Zalavár) (County Zala)**  
 Stray finds.  
 Two handled mugs with tall, curved neck are also known from this site. H. 8.2 cm and 8.5 cm.  
 Balaton Museum inv. no. 58.738.568–569. HAS AI Archives, photo negative no. 2.615.
- 10. Balatonkeresztúr–Kiserdei-dűlő (M7 Motorway, Site S–36) (County Somogy)**  
 Settlement.  
 Salvage excavation (6500 m<sup>2</sup>, Gábor Serlegi, 2003).  
 Shallow pits in two larger clusters.  
*Serlegi* (2004a); *idem* (2004b).
- 11. Balatonkeresztúr–Réti földek (M7 Motorway, Site S–35) (County Somogy)**  
 Settlement.  
 Salvage excavation (45,000 m<sup>2</sup>, Szilvia Fábián, 2003–2004).  
 A few features.  
*Fábián* (2004a); *idem* (2004b); *idem* (2007).
- 12. Balatonlelle–Gamási-dűlő (County Somogy)**  
 Settlement.  
 Field survey (1988).  
 RRM Archaeological Archives.
- 13. Balatonlelle–Kenderföld (M7 Motorway, Site S–20) (County Somogy)**  
 Settlement.  
 Salvage excavation (39,000 m<sup>2</sup>, Tibor Marton and Gábor Serlegi, 2002–2003).  
 Several features.  
*Marton–Serlegi* (2004); *idem* (2007).
- 14. Balatonlelle–Rádi domb (Site 67/3) (County Somogy)**  
 Settlement.  
 Salvage excavation (15,000 m<sup>2</sup>, Gábor Serlegi, 2005).  
 A few pits and other features.  
*Serlegi* (2006); *idem* (2007b).
- 15. Balatonlelle–Rádpusztá, Temetőalja-dűlő (Site 67/4) (County Somogy)**  
 Settlement.  
 Salvage excavation (7000 m<sup>2</sup>, Szilvia Honti and Péter Gegely Németh, 2005).  
 Lying beside a large pit complex with irregular outline were a few slightly burnt ovens dug into the ground.  
 Additional pits were also unearthed.  
*Honti–Németh* (2006); *idem* (2007b).
- 16. Balatonlelle–along the Rádi Road (County Somogy)**  
 Settlement.  
 Salvage excavation (14,872 m<sup>2</sup>, István Molnár and Carmen Sipos, 2005).  
 A few features.  
*Molnár–Sipos* (2006).
- 17. Balatonmagyaród–Hídvégpuszta, déli rév (County Zala)**  
 Settlement.  
 Salvage excavations (36,000 m<sup>2</sup>, 1981–1987).  
 Three pits. A handled mug and other characteristic finds are unpublished.  
*Bondár* (1989) 31, 34; *idem* (1995) 251; *idem* (1996b) 53, Site 113, Fig. 16.



- \*18. Balatonmagyaród–Szarkavári sziget** (County Zala)  
 Settlement.  
 Excavation (Mária Bondár, 1984).  
 Two pits. The finds comprise several typical bowl and pot fragments, and the small body fragment of an interior decorated bowl with a simple incised linear pattern.<sup>1806</sup> Unpublished.  
*Bondár* (1985); *idem* (1995) 251; *idem* (1996b) 53, Site 116.
- 19. Balatonőszöd–Dinnyeföldi-dűlő** (County Somogy)  
 Settlement.  
 Field survey (M7 Motorway, 1993).  
 Vessel fragments from the Early Bronze Age.  
 RRM Archaeological Archives.
- 20. Balatonőszöd–Temetői-dűlő (M7 Motorway, Site S–10)** (County Somogy)  
 Settlement.  
 Salvage excavation (76,190 m<sup>2</sup>, Károly Belényesy, Tünde Horváth, András Sófalvi, 2001–2002).  
 A few pits.  
*Belényesy–Horváth* (2007).
- 21. Balatonszabadi** (County Somogy)  
 Stray find.  
 Handle fragment from the Early Bronze Age.  
 RRM Archaeological Archives no. 78/37.
- 22. Balatonszemes–next to Csillagpuszta** (County Somogy)  
 Settlement.  
 Rescue excavation (580 m<sup>2</sup>, András Sófalvi, 2003).  
 Several features suggesting a larger settlement.  
*Sófalvi* (2004).
- 23. Balatonszemes–Egyenes-dűlő** (County Somogy)  
 Settlement.  
 Salvage excavation (Gábor Serlegi, 2003).  
 Three pits.  
*Serlegi* (2004c).
- 24. Balatonszemes–Szemesi-berek** (County Somogy)  
 Settlement.  
 Salvage excavation (42,000 m<sup>2</sup>, Mária Bondár, Szilvia Honti, Péter Gergely Németh, 1999–2000).  
 Several features: pits and open-air ovens with rich finds. Late Somogyvár–Vinkoci/Proto-Kisapostag period.  
*Honti–Németh* (2002); *Bondár–Honti–Németh* (2003); *Bondár et al.* (2007).
- 25–26. Balatonszentgyörgy area (Site 76/4–76/5)** (County Somogy)  
 Settlement.  
 Field surveys (Szilvia Honti, 2005–2006).  
 A few body fragments with brushed decoration from two sites: Faluvégi-dűlő (Site 76/4) and Szentegyházi-dűlő (Site 76/5).  
*Honti* (2007b).
- 27. Barcs–Vukovár** (County Somogy)  
 Stray finds.  
 Vessel fragments from the Early Bronze Age.  
 Dráva Museum inv. no. 89.4.1–2.
- \*28. Baté** (County Somogy)  
 Stray finds.  
 Field survey (Béla Eöry).  
 1. Fragment of an interior decorated bowl with an incised star motif.  
 2–3. Pot fragments with folded out rim.  
 RRM Archaeological Archives no. 88/111. Eöry Béla Collection: Site 10.

<sup>1806</sup> I am indebted to Mária Bondár for her kind personal communication on the finds.

- \*29. Báticasék–Szentá** (County Tolna)  
Settlement.  
Field survey (György Csanády).  
Rim fragment of an interior decorated bowl. Unpublished.  
*Csanády* (1997) 50.
- 30. Becsvölgye–Barabásszeg, 68 Fő Street** (County Zala)  
Settlement.  
Stray finds.  
Rusticated body fragment of a pot and an elongated knob.  
*Müller* (1971) 24, Site 19, Pl. XI. 4; *Bondár* (1995) 251.
- 31. Beleg area** (County Somogy)  
Stray find.  
Basal fragment of a pot with brushed decoration.  
RRM Archaeological Archives no. 79/167.
- 32. Boda–Nyafastó-dűlő** (County Baranya)  
Settlement.  
Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.72.14.1–2. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 251.
- 33. Boldogasszonyfa** (County Baranya)  
Stray find.  
Vessel fragment. JPM inv. no. Ö.72.5.2. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 251.
- \*34. Bonnya–Pogánydomb** (County Somogy)  
Stray finds.  
1. Rim fragment of an interior decorated bowl (*Pl. 30. 1*).  
2. Fragment of a biconical bowl with a double knob on the shoulder.  
3. Folded out rim fragment of a pot.  
4–5. Body fragments of pots with brushed decoration.  
6. Fragment of a spindle whorl/wheel model.  
RRM inv. no. 55.43.1.
- 35. Borsosgyőr–Szilfa** (County Veszprém)  
Settlement.  
Excavation (Gábor Ilon, 1989).  
Partially excavated timber-framed buildings, ditch sections and a larger pit. The pit was assigned to the Somogyvár–Vinkovci culture.  
*Ilon* (1995) 75–76, Site 17/9, Pl. III.
- \*36. Börzönce–Temetői-dűlő** (County Zala)  
Settlement.  
Excavation (890 m<sup>2</sup>, Mária Bondár, 1988–1993).  
The site extended over an approximately 8000 to 10,000 m<sup>2</sup> large area. 30 of the excavated 35 pits dated from the Early Bronze Age; 10 of these barely yielded any finds.  
Six of the 30 pits contained interior decorated bowl fragment: Pits E, É, J, L, O, P (*Bondár* [1995] 209, 233, Pl. 136. 100, Pl. 180. 431, Pl. 149. 192, Pl. 181. 464, Pl. 180. 430, Pl. 180. 425, Pl. 160. 252).  
*Bondár* (1990); *idem* (1992); *idem* (1994); *idem* (1995); *idem* (1996a); *idem* (1998) Fig. 1.
- 37. Celldömölk–Sághegy** (County Vas)  
Stray find.  
Lázár Jenő Collection.  
Small storage vessel with cylindrical neck and ovoid body. A figurine resembling the one found at Velem and “Zók type pottery” was quoted from the site: *Mozsolics* (1945) 44; *Kalicz* (1968) 80, Fo. 54. István Bóna later classified the finds as representing the Makó–Kosihy–Čaka culture: *Bóna* (1972) 10, note 47.  
*Mozsolics* (1945) 44; *Bóna* (1965a) 42, Pl. XII. 7; *Kalicz* (1968) 80, Fo. 54; *Ecsedy* (1979a) Site 24; *Bondár* (1995) 251.



- 38. Csabrendek–Hegyelő, Fehérkövek, Szőlőhegy–Ilona-major (Somlyóvásárhely)** (County Veszprém)  
 Stray finds.  
 Four vessels were found in the area of the Late Iron Age cemetery: a handled jug (H. 14.4 cm), a flask, a two-handled storage vessel with cylindrical neck and a handled pot.  
 The site was variously interpreted as a burial site (MRT 3, Site 10/3–4), a possible burial site (*Bondár* [1995] 251) and a settlement site (*Bóna* [1972] 6).  
*Darnay* (1899) Pl. XVI, Pl. XVII. 3, 6–7; *Bóna* (1965a) 42, Fig. 1. 8–9 (with the find spot specified as Somlyóvásárhely); MRT 3, 49, Site 10/3–4; *Ecsedy* (1979a) 105; *Bondár* (1995) 251 (with the find spot variously specified as Csabrendek and Somlyóvásárhely).
- \*39. Csepreg–Kavicsbánya** [gravel pit] (no. 024/3) (County Vas)  
**a. Settlement.**  
 Excavation (Mária Károlyi, 1971) and field surveys.  
 Partially excavated, rectangular sunken feature with rounded corners, perhaps a house (7 m x 7.5 m, D. 40 cm; *Károlyi* [1971–72] 177–178, Fig. 9). The pottery finds include fragments of interior decorated bowls (*ibidem* Fig. 13. 1, 3, Fig. 14. 8, Fig. 15. 5) and fragments of pots. The field survey indicated a larger settlement.  
*Károlyi* (1971–72) 177–185, Figs 9–15; *Kalicz-Schreiber* (1989) Fig. 1, Fig. 6; *idem* (1991) Fig. 1; *Bondár* (1995) 251; *Ilon* (1996) 22, note 53.  
**b. Inhumation burials (?).**  
 Stray finds (1964–1967) suggesting contracted inhumation burials, with 14 and 27 graves mentioned in the reports.  
 Excavation (Mária Károlyi, 1969–1970): five contracted inhumation burials were found. The vessel from Grave 5 and another vessel found in the cemetery were assigned to the Somogyvár–Vinkovci culture.<sup>1807</sup>  
 There is a “Somogyvár-like” vessel in the local village museum as well: *Ilon* (1996) note 51.  
*Károlyi* (1971–72) 172–177, Figs 4–8, Pl. III. 8–12, Pl. IV. 1–6, 8–20, Pl. V. 1–2; *Ilon* (1996) 19, notes 49–51.
- 40. Csértő–Szőlőhegy** (County Baranya)  
 Stray find.  
 Jug. JPM inv. no. 391. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 251.
- \*41. Csoma** (County Somogy)  
 Stray finds.  
 1. Rim fragment of a bowl decorated with an incised linear pattern on the shoulder and the handle (*Pl. 30. 2*).  
 2. Body fragment of an interior decorated bowl (*Pl. 30. 3*).  
 RRM Archaeological Archives no. 76/23.
- 42. Dabronc–Rétalja-dűlő II** (County Veszprém)  
 Settlement.  
 Field survey (1964).  
 Partially excavated pit yielding rim fragments of pots, neck fragment of a vessel with cylindrical neck and body fragments with brushed decoration.  
 MRT 3, 70, Site 12/4, Fig. 22. 31–32.
- 43. Dabronc–Temető** [cemetery] (County Veszprém)  
 Settlement.  
 Small-scale rescue excavation (1966).  
 Pit (Diam. 1 m). Finds: a two-handled larger bowl, fragments of a larger and a smaller vessel, and body fragments of a pot with brushed decoration.  
 MRT 3, 70, Site 12/5, Fig. 23. 1.
- \*44. Dombóvár** (County Tolna)  
 Stray finds.  
 Collected by Mihály Kőhegyi (1962).  
 Fragments of three restorable interior decorated footed bowls.

<sup>1807</sup> The photograph of the vessel suggests that it is not related to the Somogyvár–Vinkovci culture.

1. Fragment of the upper part of an interior and exterior decorated bowl with a small strap handle under the rim. The foot of the bowl broke off. The bowl has a smooth, dark grey surface. H. ca. 13.5 cm, dR. 27 cm. WMM inv. no. 66.300.1 (*Pl. 42. 2*).
2. Fragment of the upper part of an interior and exterior decorated bowl. The foot of the bowl broke off. The bowl has a smooth, dark grey surface. H. ca. 13.5 cm, dR. 24 cm. WMM inv. no. 66.300.2 (*Pl. 42. 1*).
3. Fragment of the upper part of an interior decorated bowl with a small strap handle under the rim. Brownish-grey. H. 17.8 cm, dR. 28.5 cm, dB. 10 cm. WMM inv. no. 83.1.35=WMM inv. no. 66.300.3 (*Pl. 42. 3–4*).

**45. Dombóvár–Fehérhidi-dűlő** (County Tolna)

Settlement, burials (?)

Field survey (Attila Gaál, 1976).

According to an amateur collector, “burials with grave goods representing the Zók culture” were found. Unpublished.

Gaál (1977).

**46. Dombóvár–Gunaras** (County Tolna)

Stray finds.

Bowl fragments from the Early Bronze Age.

RRM Archaeological Archives no. 88/78. Eöry Béla Collection: Site 23a.

**\*47. Dombóvár–TESCO (Konda Stream)** (County Tolna)

Settlement.

Salvage excavation (Géza Szabó, 2007).

Refuse pits and rectangular features (2 m x 2 m) yielding a rich array of finds, and a vessel deposit (sacrificial pit?).

Szabó (2007).

**48. Döbrököz–Kétvíz köze** (County Tolna)

Settlement.

Field surveys (István Torma, 1964; Zsuzsa Miklós, in the 1990s).

Rim fragment of a pot. WMM inv. no. 73.31.1.

Torma (1964) Site 353; Miklós (2007) 57–60.

**\*49. Döbrököz–Tűzköves/Tűszkücs** (County Tolna)

Fortified hilltop settlement (*Pl. 43. 6*).

Field surveys (István Torma, 1964; János Gábor Ódor, 1999); aerial site survey (Zsuzsa Miklós, 1999).<sup>1808</sup>

Large, fortified settlement located north of Döbrököz (320 m x 160 m; 51,200 m<sup>2</sup>). An inner oval area (120 m x 80 m) on the hilltop was enclosed within a ditch. Another larger, oval area (280 m x 160 m) protected by a ditch and rampart adjoins the first enclosure to the south. Traces of the latter can still be made out on the surface.

The high number of pottery sherds scattered on the surface indicate a major site and its rapid destruction due to agricultural cultivation.

Stray finds of the late Vučedol and Somogyvár–Vinkovci cultures (*Pls 43–44*):

- 1–6. Rim and body fragments of interior and exterior decorated bowls. WMM inv. no. 73.20.16 (*Pl. 44. 1–6*).
7. Fragment of the lower part of an interior decorated bowl with low, solid cross-shaped foot. Hatched triangle decoration on the foot. dB. 8 cm. WMM inv. no. 73.20.15 (*Pl. 44. 7*).
8. Rim fragment of an interior, exterior and rim decorated bowl. WMM inv. no. 73.20.13 (*Pl. 44. 8*).
9. Rim fragment of an interior, exterior and rim decorated bowl. WMM inv. no. 73.20.17 (*Pl. 44. 9*).
- 10–14. Rim and body fragments of interior and rim decorated bowls. WMM inv. no. 73.20.16 (*Pl. 44. 10–14*).
15. Shoulder fragment of a jug with deeply incised decoration. WMM inv. no. 73.20.14 (*Pl. 43. 1*).
16. Fragment of a jug decorated with triple line pattern on the shoulder. WMM inv. no. 73.20.14 (*Pl. 43. 4*).

<sup>1808</sup> I am indebted to Zsuzsa Miklós and István Torma (HAS Archaeological Institute), as well as János Gábor Ódor (Wosinsky Mór Museum, Szekszárd) for their kind personal communication on the finds.



17. Fragment of a small handled jug. H. 12 cm (*Pl. 43. 3*).
- 18–20. Rim fragments of bowls with everted rim. WMM inv. no. 73.20.13–14.
21. Folded out rim fragment with round, impressed decoration. WMM inv. no. 73.20.14.
- 22–24. Rim fragments of handled pots. WMM inv. no. 73.20.17.
25. Pot fragment with folded out rim. WMM inv. no. 73.20.14.
26. Pot rim fragment. WMM inv. no. – (*Pl. 43. 5*).
27. Fragment of a clay mould for a shaft-hole axe. WMM inv. no. – (*Pl. 43. 2*).
- Torma* (1964) Site 155; *Miklós* (2002); *Ódor* (2002); *Miklós* (2007) 60–64.
- 50. Döbrököz–TSZ silógödör** (County Tolna)
- Stray find.
- Gift from Bálint Maller (1964).
- Handled jug with a tall, curved neck. H. 12.1 cm, dR. 7.3 cm. WMM inv. no. 66.37.1 (*Pl. 43. 3*).
- Bóna* (1965a) Pl. XV. 4 (findspot specified as Lengyel).
- 51. Dörgicse–Aszó II (previously Alsódörgicse)** (County Veszprém)
- Settlement.
- Stray finds (1940s).
- Unstratified finds: handled mug (H. 8 cm), two-handled flask (H. 12 cm), fragment of a handled jug, mug fragments, body fragments of pots with rusticated surface and a figurine (H. 6 cm).
- Bóna* (1965a) 42, Pl. XIV. 13–15 (findspot specified as Alsódörgicse); MRT 2, 86, Site 18/9, Pl. 6. 1–3; *Ecsedy* (1979a) 104; *Bondár* (1995) 251.
- \*52. Dunaszekcső–Kálvária-hegy** (County Baranya)
- Settlement.
- a.** Finds collected by Mór Wosinsky.
- Late Vučedol finds:
1. Rim fragment of an interior and exterior decorated bowl.
  2. Fragment of a decorated “chest” (*Csalog* [1941] Pl. III. 7–8).
- Somogyvár–Vinkovci finds:
- 1–2. Body fragments of interior decorated bowls.
  3. Round, hollow foot fragment of an interior decorated bowl with a linear pattern in the stab-and-drag style. dB. 6.5 cm x 6.7 cm. WMM inv. no. K.13.938.1–2; 85. 259.1 (*Csalog* [1941] Pl. III. 6, 9–10).
- Wosinsky* (1896) 402; *Csalog* (1941) 9, Pl. III. 6–10; *Bándi* (1979) 70; *Ecsedy* (1985); *Bondár* (1995) 251.
- b.** Csanády György Collection (Bátaszék).
- Vučedol vessel fragments, fragments of interior decorated bowls and decorated vessel body fragments from the site.
- Csanády* (1997) 50, Pl. VII.
- \*53. Dunaszekcső–Várhegy** (County Baranya)
- Settlement.
- Small-scale rescue excavation (Valéria Kovács, Borbála Maráz, 1974) and unstratified finds (Mór Wosinsky, György Csanády).
- Various finds of the Vučedol–Zók, late Vučedol and early Somogyvár–Vinkovci cultures.
- Unstratified interior decorated bowls:
1. Small interior decorated bowl with solid, cross shaped foot. H. 3 cm (*Ecsedy* [1985] 95, Fig. 9. 1).
  - 2–4. Rim fragments of interior decorated bowls (*ibidem* 95, Fig. 10. 1–3).
- Wosinsky* (1896) 245, 402; *Patay* (1938) 23; *Bándi* (1979) 70; *Ecsedy* (1985); *Bondár* (1995) 251.
- 54. Edde** (County Somogy)
- Settlement.
- Field surveys (in the 1970–1980s and Dénes Jankovich-Bésán and others, 1999–2004).
- Vessel fragments from the Early Bronze Age.
- RRM Archaeological Archives no. 76/25; *Fekete et al.* (2005) 95, Fig. 2.
- 55. Edde–Szőlőhegy** (County Somogy)
- Settlement.
- Field surveys (in the 1970s–1980s and Dénes Jankovich-Bésán and others, 1999–2004).
- Vessel fragments from the Early Bronze Age.
- RRM Archaeological Archives no. 75/48; *Fekete et al.* (2005) 95, Fig. 2.

- 56. Erzsébet-TSZ major** (County Baranya)  
Inhumation burial or settlement.  
István Bóna interpreted the find spot as a burial site, based on information from Attila Kiss (*Bóna* [1965a] 43). The single grave good was a handled biconical jug. JPM inv. no. 1963.1.1. Unpublished.  
The site was described as a settlement based on a field survey by Gábor Bándi: *Bándi* (1979) 70; *Bondár* (1995) 251.  
*Bóna* (1965a) 43; *Bándi* (1979) 70; *Ecsedy* (1979a) Fo. 28; *Bondár* (1995) 251.
- 57. Felsőnyék** (County Tolna)  
Settlement.  
Field survey (István Torma, 1961).  
Body fragment with brushed decoration. WMM inv. no. 73.66.1.  
*Torma* (1964) Site 272.
- 58. Felsőnyék–Aladárpusztá** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
Vessel fragments from the Early Bronze Age.  
*Torma* (1964) Site 29.
- 59. Felsőnyék–29 Táncsics Street** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
Vessel fragments from the Early Bronze Age.  
*Torma* (1964) Site 33.
- 60. Fonyód–Bézsény-pusztá (M7 Motorway, Site S–33)** (County Somogy)  
Settlement.  
Salvage excavation (51,800 m<sup>2</sup>, Zsolt Gallina, Krisztina Somogyi, 2003).  
A few features of the Somogyvár–Vinkovci and Kisapostag cultures.  
*Gallina* (2004); *Gallina–Somogyi* (2004b).
- 61. Fonyód–Vasúti-dűlő 2–Mérnöki telep (M7 Motorway, Site S–34)** (County Somogy)  
Settlement.  
Salvage excavation (8414 m<sup>2</sup>, Zsolt Gallina, Krisztina Somogyi, 2004).  
Three pits.  
*Gallina* (2005); *Gallina–Somogyi* (2007).
- 62. Galambok–Hársas-erdő** (County Zala)  
Settlement.  
Salvage excavation (4835 m<sup>2</sup>, Csilla Száraz, 2005).  
Features and ditches containing a few finds only (165 prehistoric features altogether, mostly from the Early Bronze Age). Pit 80 contained an intact Somogyvár–Vinkovci vessel.  
*Száraz* (2006).
- 63. Galambok–Öreghegy** (County Zala)  
Fortified settlement (?).  
Field surveys (László Horváth, in 1980s).  
Vessel fragments from the Early Bronze Age. TGyM inv. nos 79.74.1–79, 79.75.12, 83.13.1–4.  
Unpublished.  
*Horváth* (1983b) 20; *idem* (1994) 97; *Bondár* (1995) 251.
- 64. Geresd–Római temető [cemetery]** (County Baranya)  
Settlement.  
Stray find.  
Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.69.33.3–4. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 251.
- 65. Gombosszeg** (County Zala)  
Settlement.  
Vessel fragments from the Early Bronze Age.  
*Müller* (1971) 34, Site 36; *Bondár* (1995) 251.



- 66. Gönyű–Tetődomb (Hömbölgő)** (County Győr-Moson-Sopron)  
 Inhumation burial under a tumulus.  
 Unearthed during earth-moving operations in 1948.  
 Inhumation burial at a depth of 40–50 cm.  
 Two grave goods:  
 1. Handled jug. H. 16 cm.  
 2. Large two-handled amphora with cylindrical neck. H. 56.5 cm.  
*Bóna* (1965a) 40–41, Pl. XIII. 2, 4; *Figler* (1994) 25, Fo. 22, Fig. 2; *Bondár* (1995) 251.
- 67. Gyömk** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1963).  
 Early Bronze Age (“Zók-like”) vessel fragments.  
*Torma* (1964) Site 262.
- 68. Győr–Szabadhegy–Ötházi-dűlő** (County Győr-Moson-Sopron)  
 Stray find (1948).  
 Handled jug with tall, curved neck. H. 15 cm.  
*Bóna* (1965a) 41, Pl. XIII. 3; *Figler* (1994) 25, Fo. 23, Fig. 2; *Bondár* (1995) 251.
- 69. Győrszemere–Kutyor** (County Győr-Moson-Sopron)  
 Stray find.  
 Handled mug. H. 5.5 cm.  
*Mithay* (1942) 11, Pl. VII. 4; *Bóna* (1965a) 41, Pl. XII. 3; *Figler* (1994) 25, Fo. 25, Fig. 2; *Bondár* (1995) 251.
- \*70. Győrszemere–Tóth tag** (County Győr-Moson-Sopron)  
 Settlement.  
 Excavation (András Figler, 1984).  
 Only a selection of the finds has been published. The attribution of the finds to the Somogyvár–Vinkovci culture is uncertain; there are characteristic Makó–Kosihy–Čaka types among the finds.  
 Rim and body fragments of interior decorated bowls.  
*Figler* (1994) 22, 25–27, Fo. 24, Fig. 2, Abb. 7–8; *Bondár* (1995) 251.
- 71. Gyulaj** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1962).  
 Biconical spindle whorl. WMM inv. no. 73.77.19.  
*Torma* (1964) Site 142.
- \*72. Gyulaj** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1961).  
 1. Rim fragment of an interior decorated bowl. WMM inv. no. 73.85.13.  
 2. Rim fragment of a pot with folded out rim. WMM inv. no. 73.85.14.  
 3. Rim fragment of a bowl with slightly everted, thickened rim. WMM inv. no. 73.85.13.  
*Torma* (1964) Site 305.
- \*73. Gyulaj–Banyahegy (Halyagos-dűlő)** (County Tolna)  
 Settlement.  
**a.** Finds collected by Mór Wosinsky.  
 In addition to the published interior decorated bowl fragments (*Wosinsky* [1896] Pl. CVI. 1–4b; *idem* [1904] Pl. LII. 1–6; *Csalog* [1941] 7, Pl. II. 3–9), body fragments with pinched decoration are also mentioned (*ibidem* 7).  
 Vučedol–Zók culture:  
 1. A rectangular box-like vessel standing on four small, round knobs and decorated with hatched triangles (*Wosinsky* [1896] Pl. CVI. 1a–b; *idem* [1904] Pl. LII. 1–2; *Csalog* [1941] 7, Pl. II. 4). WMM inv. no. K.12.938.1 (now lost).  
 2. Rim fragment of an interior, exterior and rim decorated bowl. Greyish-black, polished (*Csalog* [1941] 7, Pl. II. 3). WMM inv. no. 84.177.1 (*Pl.* 45. 1).  
 3. Rim fragment of an interior, exterior and rim decorated vessel (*Csalog* [1941] 7, Pl. II. 5). WMM inv. no. 84.178.1 (*Pl.* 45. 3).

4. Rim fragment of an interior, exterior and rim decorated vessel (*Csalog* [1941] 7, Pl. II. 6). WMM inv. no. 84.179.1 (*Pl.* 45. 2).

Late Vučedol culture:

1. Basal fragment of an interior decorated bowl with low, cross-like, solid foot (*Wosinsky* [1896] Pl. CVI. 4a–b; *idem* [1904] Pl. LII. 3, 6). WMM inv. no. 85.258.1 (*Pl.* 45. 4).

Early Somogyvár–Vinkovci culture:

1. Rim fragment of an interior and exterior decorated bowl (*Wosinsky* [1896] Pl. CVI. 2–3; *idem* [1904] Pl. LII. 4–5).
2. Rim fragment of an interior and exterior decorated bowl (*Csalog* [1941] 7, Pl. II. 7).
3. Fragment of a round, hollow foot (H. 5.6 cm; *Csalog* [1941] 7, Pl. II. 8).
4. Body fragment of an interior decorated bowl (*Csalog* [1941] 7, Pl. II. 9).

**b.** Field survey (István Torma, 1962).

Large number of Somogyvár–Vinkovci finds among the finds from the Late Bronze Age.

1. Fragments of interior decorated bowls. WMM inv. no. 73.81.5.
2. Foot fragment of an interior decorated bowl with low, cross shaped foot. WMM inv. no. 73.81.6.
3. Rim fragment of a pot with folded out rim. WMM inv. no. 73.81.17.

WMM inv. no. 73.81.5–8, 17, 26, 31–33; *Torma* (1964) Site 145.

**c.** Field survey (Gyula Mészáros, 1966). The finds were partially published by Gábor Bándi in 1982 (*Bándi* [1982] 165, Abb. 2).

1. Rim fragment of an interior, exterior and rim decorated bowl (*Bándi* [1982] Abb. 2. 1). WMM inv. no. 66.331.22 (*Pl.* 46. 4).
2. Shoulder fragment of a jug decorated with hatched triangles and punctates (*Bándi* [1982] Abb. 2. 2). WMM inv. no. 66.331.24.
3. Rim fragment of an interior, exterior and rim decorated bowl (*Bándi* [1982] Abb. 2. 3). WMM inv. no. 66.331.21.
4. Cross shaped, hollow foot fragment of an interior decorated bowl (*Bándi* [1982] Abb. 2. 4). WMM inv. no. 66.331.19 (*Pl.* 45. 5).
5. Body fragment of an interior and exterior decorated bowl (*Bándi* [1982] Abb. 2. 5). WMM inv. no. 66.331.32 (*Pl.* 46. 3).
6. Rim fragment of an interior, exterior and rim decorated bowl (*Bándi* [1982] Abb. 2. 6). WMM inv. no. 66.331.13 (*Pl.* 46. 2).
7. Rim fragment of an interior, exterior and rim decorated bowl (*Bándi* [1982] Abb. 2. 7). WMM inv. no. 66.331.31 (*Pl.* 46. 5).
8. Rim fragment of an interior, exterior and rim decorated bowl (*Bándi* [1982] Abb. 2. 8). WMM inv. no. 66.331.20 (*Pl.* 46. 1).
9. Low, round, hollow foot fragment of an interior decorated bowl (*Bándi* [1982] Abb. 2. 11). WMM inv. no. 66.331.23 (*Pl.* 46. 6).
10. Fragment of a handled jug. WMM inv. no. 66.331.33.
11. Fragment of the lower part of a flask. dB. 6.5 cm. WMM inv. no. 66.331.9.
12. Rim fragment of a handled vessel (*Bándi* [1982] Abb. 2. 12). WMM inv. no. 66.331.11 (*Pl.* 46. 7).
13. Fragment of a decorated, handled bowl (*Bándi* [1982] Abb. 2. 13). WMM inv. no. 66.331.12.
14. Rim fragment of a handled vessel (*Bándi* [1982] Abb. 2. 14). WMM inv. no. –.
15. Fragment of the lower part of a bowl (*Bándi* [1982] Abb. 2. 15). WMM inv. no. –.
16. Pot shoulder fragment (*Bándi* [1982] Abb. 2. 16). WMM inv. no. 66.331.25 (*Pl.* 46. 8).
17. Rim fragment of a handled pot (*Bándi* [1982] Abb. 2. 17). WMM inv. no. 66.331.10.
18. Fragment of a large, round, coarsely made clay wheel (*Bándi* [1982] Abb. 2. 18). WMM inv. no. 66.331.28 (*Pl.* 46. 12).
19. Pot rim fragment (*Bándi* [1982] Abb. 2. 19). WMM inv. no. 66.331.26.
- 20–22. Small, biconical spindle whorls (*Bándi* [1982] Abb. 2. 10). WMM inv. no. 66.331.10 (*Pl.* 46. 9–11).
23. Clay artefact of unknown function (*Bándi* [1982] Abb. 2. 9).

#### **74. Gyulaj–Pogányvár** (County Tolna)

Settlement, fortified (?).

Field surveys (István Torma, 1961, 1963; Zsuzsa Miklós).



The date of the fortified settlement is uncertain because both Early and Middle Bronze Age finds were found during the field surveys. An unfortified open settlement adjoins the triangular, fortified settlement from the south.

WMM inv. no. 73.87. 1–28; *Torma* (1964) Site 308; *Miklós* (2007) 80–84, Fig. 64.

**75. Hidegség–Templom-domb** (County Győr-Moson-Sopron)

Settlement.

Small-scale rescue excavation (János Gömöri, 1990).

Clay mould for a Kömlöd–Kozarac type axe.

*Gömöri* (1992); *idem* (2002) 14.

**\*76. Hollád** (County Somogy)

Stray find.

Low, hollow foot fragment of an interior decorated bowl.

RRM Archaeological Archives no. 77/34.

**77. Hollád–Körforgalom** [roundabout] (County Somogy)

Settlement.

Excavation (István Molnár, 2007).

One feature.

*Molnár* (2008).

**78. Homokkomárom–beside the church** (County Zala)

Settlement, fortified (?).

Field survey (László Horváth, 1991).

*Horváth* (1994) 97; *Bondár* (1995) 251.

**79. Iregszemcse** (County Tolna)

Settlement.

Field survey (István Torma, 1963).

A few body fragments with brushed decoration. WMM inv. no. 73.83.5.

*Torma* (1964) Site 211.

**80. Ivánbattyán–Döggút** (County Baranya)

Settlement.

Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.72.26.1–4. Unpublished.

*Bándi* (1979) 70; *Bondár* (1995) 252.

**81. Between Kadarkút and Somogyszécsény** (County Somogy)

Settlement.

Field survey (Kornél Bakay, Imre Stammer, 1975).

Body fragments of pots.

RRM Archaeological Archives.

**82. Kajárpec–Miklós major** (County Győr-Moson-Sopron)

Stray finds.

Finds in the Collection of the Kajárpec Primary School. Unpublished.

*Figler* (1994) 25, Fo. 27, Fig. 2; *Bondár* (1995) 252.

**\*83. Kaposfüred–Desedapart** (County Somogy)

Stray find.

Fragments of interior decorated bowls.

RRM Archaeological Archives no. 88/77. Eöry Béla Collection: Site 22.

**84. Kaposfüred–Földnyelv** (County Somogy)

Stray find.

Vessel fragments from the Early Bronze Age.

RRM Archaeological Archives no. 88/116. Eöry Béla Collection: Site 15.

**85. Between Kaposfüred and Juta** (County Somogy)

Stray finds.

A few body fragments with brushed decoration.

RRM Archaeological Archives no. 88/106. Eöry Béla Collection: Site 5.

**\*86. Kaposújlak–Várdomb (Site 61/29)** (County Somogy)

Fortified settlement and burials.

Field survey (Béla Eöry) and salvage excavation (29,000 m<sup>2</sup>, Zsolt Gallina, Krisztina Somogyi, 2002).

Large, fortified settlement with approximately 400 features, yielding a rich variety of pottery and animal bone finds, as well as clay moulds for shaft-holes axes and several interior decorated bowls (Fig. 59. 7–9).

Three inhumation burials were found (Grave 66, Features 297–328–283(–329), and 283).

Eöry Béla Collection: Site 19; *Kulcsár* (1999a) 118, 124; *Somogyi* (2002); *K. Zoffmann* (2002); *Gallina-Somogyi* (2004a); *Somogyi* (2004).

**87. Kaposvár** (County Somogy)

Settlement.

Field survey (1972).

Body fragments with brushed and rusticated decoration.

RRM Archaeological Archives no. Site IV/1/Site 3.

**88. Kaposvár** (County Somogy)

Stray finds.

Pot body fragments.

RRM Archaeological Archives no. 76/61.

**89. Kaposvár–Deseda Stream** (County Somogy)

Stray finds.

Vessel fragments from the Early Bronze Age.

RRM inv. no. 56.6.1.

**90. Kaposvár–14 Irinyi Street** (County Somogy)

Stray find.

Fragment of a knob handle.

RRM Archaeological Archives

**91. Kaposvár–Simongáti-dűlő (Kisgát)** (County Somogy)

Stray find.

Fragment of a spindle whorl/wheel model with raised ridge around the central perforation.

RRM Archaeological Archives, Eöry Béla Collection: Site 13.

**92. Kaposvár–40. órház** (County Somogy)

Stray find.

Body fragment with brushed decoration.

RRM Archaeological Archives.

**93. Kaposvár–Site 1 (Kaposi berek)** (County Somogy)

Stray find.

Decorated basal fragment of a thin-walled vessel, decorated with a lime encrusted linear pattern in the stab-and-drag style.

RRM Archaeological Archives no. 74/42 (later Kaposvár–Site 28).

**94. Kaposvár–Site 10** (County Somogy)

Stray find.

Pot rim fragment.

RRM Archaeological Archives.

**95. Kaposvár–Site 15** (County Somogy)

Stray finds.

Vessel fragments from the Early Bronze Age.

RRM Archaeological Archives no. 74/120.

**96. Kaposvár–Site 16 (Keceli-hegy)** (County Somogy)

Stray finds.

1. Fragment of a conical bowl decorated with a linear pattern on the shoulder (*Pl. 30. 4*).

2. Body fragments with rusticated surface.

RRM Archaeological Archives no. 74/52.

**97. Kaposvár–Site 33** (County Somogy)

Stray find.

Rim fragment of a pot with doubly folded out rim.

RRM Archaeological Archives.



**98. Kaposvár–Site 37** (County Somogy)

Stray finds.

Vessel fragments from the Early Bronze Age.

RRM Archaeological Archives no. 74/50 (later Site 9)

**99. Kaposvár–between Site 39 and Site 40** (County Somogy)

Stray finds.

Pot body fragments from the Early Bronze Age.

RRM Archaeological Archives no. 78/289.

**100. Kaposvár–Road 61 (Sites 4, 12, 13, 14)** (County Somogy)

Settlement.

Salvage excavation (18,842 m<sup>2</sup>, 12,096 m<sup>2</sup>, Edith Bárdos, Zsolt Gallina, 1999).

Pits, features and contracted inhumation burials without grave goods forming two separate clusters (Site 4 and Sites 12–14).

*Bárdos* (2000) Pl. 6. 4; *Bárdos–Gallina* (2002).

**101. Karád** (County Somogy)

Stray find.

Handled jug. H. 12.2 cm, dR. 3 cm, dB. 4.2 cm (*Pl. 30. 7*).

RRM inv. no. 61.282.1.

**102. Karád area** (County Somogy)

Settlement.

Field survey (2004).

*Virágos* (2005).

**\*103. Kánya** (County Somogy)

Settlement.

Excavation (József Csalog, 1939).

Two rectangular features (house?), a few post-holes, pits and ovens were uncovered. Selection of the finds:

1. Rim fragment of an interior decorated bowl (*Csalog* [1941] Pl. V. 15; here *Pl. 33. 1*).

2–4. Fragments of biconical bowls (*Csalog* [1941] Pl. V. 1, 7, 13; here *Pl. 33. 2–4*).

5. Rim fragment of a handled jug (*Csalog* [1941] Pl. V. 10; here *Pl. 33. 5*).

6. Rim fragment of a pot decorated with a linear pattern on the shoulder (*Csalog* [1941] Pl. V. 5; here *Pl. 33. 6*).

7. Small handled pot (*Csalog* [1941] Pl. VI. 3; here *Pl. 34. 1*).

8. Fragment of a small handled pot (*Csalog* [1941] Pl. V. 20; here *Pl. 34. 2*).

9. Fragment of a handled pot with an incised linear pattern on the shoulder (*Csalog* [1941] Pl. V. 17; here *Pl. 34. 3*).

10. Rim fragment of a jug (*Pl. 34. 4*).

11. Rim fragment of a handled pot (*Csalog* [1941] Pl. V. 11; here *Pl. 34. 5*).

12. Fragment of a handled pot (*Pl. 34. 6*).

13. Clay tuyère (*Pl. 34. 7*).

14–17. Rim fragments of various pots (*Csalog* [1941] Pl. V. 4, 18–19; here *Pl. 35. 1–4*).

*Csalog* (1941) 9–13, Pls IV–VI.

**104. Kemendollár–Várdomb** (County Zala)

Settlement.

Excavation (Gyula Nováki, 1952).

Unstratified finds: basal fragment of a strainer and a handled jug. ZGM inv. no. 54.3. 1–3.

*Nováki* (1960) 99, Fig. 3. 3–4; *Bóna* (1965a) 42, Pl. XVI. 10; *Ecsedy* (1979a) 104, Fo. 23; *Kalicz-Schreiber* (1991) 10, Fig. 6. 9; *Bondár* (1995) 252.

**105. Kemenesszentpéter–Dombi-dűlő** (County Veszprém)

Settlement.

Field survey (Gábor Ilon).

*Ilon* (1995) 90, Site 37/3.

- 106. Keszthely–Alsódobogó** (County Zala)  
 Stray find.  
 Shaft-hole axe of the Bányabükk type.  
*Koppány–Péczely–Sági* (1962) 7, Fig. 3; MRT 1, 77, Site 21/8, Pl. 7. 13.
- 107. Keszthely–Halászcserda** (County Zala)  
 Settlement.  
 Excavation (Róbert Müller, 1973).  
 An Early Bronze Age dwelling pit with a grinding stone and fragments of two larger vessels on its floor.  
*Müller* (1974); *Bondár* (1989) 35, Fo. 8; *idem* (1995) 252; *idem* (1996b) 53, Site 9.
- 108. Keszthely–Lehenrét** (County Zala)  
 Cremation burial.  
 Human ashes in a large bowl together with a handled jug and a bronze (?) pin.  
 MRT 1, 95, Site 21/56, Pl. 7. 12, 14; *Bondár* (1989) 35, Fo. 10; *Kalicz-Schreiber* (1991) Fig. 5. 11–12;  
*Bondár* (1995) 252; *idem* (1996b) 53, Site 116.
- 109. Keszthely–Újdúló** (County Zala)  
 Settlement.  
 Field survey (1963).  
 Pottery fragments from the Early Bronze Age.  
 MRT 1, 95, Site 21/60; *Bondár* (1989) 35, Fo. 12; *idem* (1995) 252; *idem* (1996b) 53, Site 12.
- 110. Keszthely–18. sz. vasúti őrház (Keszthely–Fenékpusztja)** (County Zala)  
 Burial (?).  
 Stray finds (gift of K. Fogarassy, 1943).  
 The four intact vessels (two handled mugs, a two-handled jug and a handled pot) suggested a Somogyvár–Vinkovci burial. An additional vessel is also quoted from this site (MRT 1, Site 21/23, Pl. 7. 7).  
*Bóna* (1965a) 42, Pl. XIV. 1–3, 5; MRT 1, 80, Site 21/23, Pl. 7. 5, 7, 9–11; *Ecsedy* (1979a) 104, Fo. 20;  
*Bondár* (1989) 34, Fo. 4; *Kalicz-Schreiber* (1991) 10, Fig. 5. 1–2, 5–6; *Bondár* (1995) 252; *idem* (1996b) 53, Site 15.
- 111. Keszü–Berekalja** (County Baranya)  
 Settlement.  
 Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.72.71.1. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 252.
- 112. Kéthely–Baglyas-domb** (County Somogy)  
 Settlement.  
 Stray finds.  
 Five vessels of the Somogyvár–Vinkovci culture:  
 1. Jug with cylindrical neck and biconical body. H. 14 cm.  
 2. Handled mug.  
 3. Handled flask. H. 10 cm.  
 4. Fragment of a handled flask. Unpublished.  
 5. Fragment of a flask with incised decoration. H. 9 cm.  
*Kuzsinszky* (1920) 29–30, Fig. 37. 11–13, 15; *Bóna* (1965a) 42, Pl. XIV. 6, 9–11; *Ecsedy* (1979a) 104, Fo. 3; *Kalicz-Schreiber* (1991) Fig. 5. 7–10; *Bondár* (1995) 252.
- 113. Kétújfalu–Szentmihályfa** (County Baranya)  
 Stray finds.  
 One smaller and one taller flask. JPM inv. no. 256–257.  
*Bóna* (1965a) 44, Pl. XVI. 12–13; *Bándi* (1979) 72; *Ecsedy* (1979a) 104, Fo. 32; *Bondár* (1995) 252.
- 114. Kisjakabfalva** (County Baranya)  
 Settlement.  
 Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.59.37.1–7. Unpublished.  
*Bándi* (1979) 70; *Bondár* (1995) 252.
- 115. Kissziget–Temetődomb** (County Zala)  
 Settlement.  
 Field survey.  
*Bánffy* (1998) 12, 16, Fig. 1. 15; *Bondár* (1998) 22.



- 116. Komlósd–Szőlőhegy** (County Somogy)  
Settlement.  
Excavation (Szilvia Honti, 1990).  
Beehive shaped pit.  
*Honti* (1992); *Bondár* (1995) 252.
- 117. Koppányszántó** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
Vessel fragments from the Early Bronze Age.  
*Torma* (1964) Site 88.
- 118. Koppányszántó–Rendeserdő** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
An Early Bronze Age, “Makó-like” bowl fragment.  
*Torma* (1964) Site 86.
- 119. Koroncó** (County Győr-Moson-Sopron)  
Stray finds.  
Two jugs, one with a handle, the other handleless. H. 15.5 cm and 17.5 cm.  
*Mithay* (1942) 6, Pl. I. 10–11; *Bóna* (1965a) Pl. XII. 1–2; *Figler* (1994) 25, Fo. 28, Fig. 2; *Bondár* (1995) 252.
- 120. Kozármisleny–Öregszőlődomb** (County Baranya)  
Settlement.  
Field survey (Rezső Pusztai, 1950).  
*Bándi* (1979) 70; *Bondár* (1995) 252.
- \*121. Kőkény** (County Baranya)  
Stray finds.  
1. Fragment of a biconical handled mug. Unpublished (*Bóna* [1965a] 43).  
2. Fragment of an interior decorated footed bowl. Unpublished (*Ecsedy* [1979a] 104, Fo. 9).  
JPM inv. no. 62.162.1–5. *Bóna* (1965a) 43; *Ecsedy* (1979a) 104, Fo. 9; *Bondár* (1995) 252.
- 122. Kőkény–Kőkénypusztá-Somoskötető** (County Baranya)  
Settlement.  
Field survey (Rezső Pusztai and K. Kardhordó).  
*Bándi* (1979) 70.
- \*123. Lánycsók–Égettmalom (Bácsfapuszta)** (County Baranya)  
Settlement.  
Excavation (Nándor Kalicz and István Ecsedy, 1976).  
Pit 1976/3: Vučedol–C period, Pits “b” and 22: Somogyvár–Vinkovci culture.  
Finds from Pit 1976/3: 1. Interior, exterior, rim and foot decorated bowl with low, solid, cross shaped foot,  
2. fragment of the lower part of an interior, exterior and foot decorated bowl with low, solid, cross shaped foot, 3–6. further rim and body fragments of interior decorated bowls (*Ecsedy* [1978a] 124, Pl. IV. 3, Pl. V. 3–4, 6; *idem* [1980] 95, Pl. I. 1–2, Pls II–III).  
*Bándi* (1979) 70; *Ecsedy* (1978a); *idem* (1979a) 105, Fo. 35; *idem* (1980); *Kalicz–Ecsedy* (1980) 213; *Bondár* (1995) 252.
- \*124. Lengyel (Mucsi–Lengyel)** (County Tolna)  
Settlement.  
Excavations (Mór Wosinsky, 1882–1888).  
Unstratified finds of the Vučedol C and Somogyvár–Vinkovci cultures.  
József Csalog assigned three interior decorated bowls to the Vučedol–Zók culture (*Csalog* [1941] 6–7, Pl. II. 1–2). In 1965, István Bóna assigned 22 vessels of the Wosinsky Mór Collection to the Somogyvár–Vinkovci culture. The cultural attribution of two bowls (*Bóna* [1965a] 43, Pl. XV. 10, 13) and a pedestalled hanging vessel decorated with a pattern in the stab-and-drag style (*Wosinsky* [1896] Pl. XCI. 1; *Bóna* [1965a] 43, Pl. XV. 7) to the late Vučedol or the Somogyvár–Vinkovci culture is uncertain.  
1. Interior and exterior decorated small bowl. H. 8 cm (*Wosinsky* [1896] Pl. XCI. 6a–b; *idem* [1904] Pl. XXX. 5a–b; *Csalog* [1941] 6; *Bóna* [1965a] 43, Pl. XV. 13).

2. Rim fragment of an interior decorated bowl with chequerboard decoration (*Wosinsky* [1896] Pl. LXXV. 13; *idem* [1904] Pl. XXIX. 2; *Patay* [1940] 2–3; *Csalog* [1941] 6–7, Pl. II. 1).
3. Round, cylindrical hollow foot fragment of an interior decorated bowl. H. 5.5 cm (*Csalog* [1941] Pl. II. 2).
4. Fragment of a pot with cylindrical neck. WMM inv. no. 60.302.1 (*Bóna* [1965a] 43, Pl. XV. 2).
5. Handled bowl (*Bóna* [1965a] 43, Pl. XV. 1).
6. Handled bowl (*Bóna* [1965a] 43, Pl. XV. 3).
7. Handled jug (*Bóna* [1965a] 43, Pl. XV. 4).
8. Small handled mug. H. 10.5 cm, dR. 3.4 cm, dB. 3.2 cm. WMM inv. no. 59.1400.1 (*Bóna* [1965a] 43, Pl. XV. 5).
9. Fragment of the lower part of a jug with handle (*Bóna* [1965a] 43, Pl. XV. 8).
10. Fragment of a handled jug with biconical body and cylindrical neck. H. 13.3 cm. WMM inv. no. B.132.933.93 (*Wosinsky* [1896] Pl. LXXXVII. 6; *Bóna* [1965a] 43, Pl. XV. 9).
11. Fragment of a handled jug with tall, curved neck. H. 12.5 cm. WMM inv. no. 58.250.1 (*Bóna* [1965a] 43, Pl. XV. 11).
12. Fragment of the lower part of a small handled mug (*Bóna* [1965a] 43, Pl. XV. 14).
13. Fragment of a handled jug with tall, curved neck. WMM, now lost (*Bóna* [1965a] 43, Pl. XV. 15).
14. Similar, but smaller handled jug. WMM, now lost (*Wosinsky* [1896] Pl. LXXXVII. 5; *Bóna* [1965a] 43, Pl. XV. 16).
15. Similar, but smaller handled jug. WMM, now lost (*Bóna* [1965a] 43, Pl. XV. 17).
16. Biconical mug. H. 10 cm (*Wosinsky* [1896] Pl. LXXXVII. 2 (?); *Bóna* [1965a] 43, Pl. XV. 18).
17. Cylindrical flask with the stub of two small handles on the rim. WMM inv. no. B.933.74.1 (*Wosinsky* [1896] Pl. XXIX. 2; *Bóna* [1965a] 43, Pl. XV. 19).
18. Fragment of a similar, but taller flask. WMM inv. no. 59.279.1 (*Bóna* [1965a] 43, Pl. XV. 6).
- 19–21. István Bóna quoted three handled jug fragments (*Bóna* [1965a] 43).
22. Interior and exterior decorated footed bowl (*Wosinsky* [1896] Pl. XCI. 3a–b; *idem* [1904] Pl. XXXI). *Wosinsky* (1896) Pl. LXXXVII. 2, 5–6, Pl. XCI. 3a–b, 6a–b; *idem* (1904) Pl. XXX. 5a–b, Pl. XXXI; *Patay* (1940) 2–3; *Csalog* (1941) 6–7, Pl. II. 1–2; *Bóna* (1965a) 43, Pl. XV; *Kalicz* (1968) 80, Fo. 63; *Bondár* (1995) 252.

**\*125. Letenye–Szentkeresztomb (County Zala)**

Settlement.

Small-scale rescue excavation (ca. 300 m<sup>2</sup>, Nándor Kalicz, István Horváth, István Torma, 1965).<sup>1809</sup>

Traces of six pits and a fireplace were identified. Selection of the finds:

1. Interior, exterior and rim decorated bowl bearing a linear pattern in the stab-and-drag style. The round, hollow foot is also decorated. H. 8.4 cm (*Pl.* 36. 1).
  - 2–3. Bowl fragments with a knob set on the rim. dR. 20–22 cm (*Pl.* 36. 2–3).
  4. Fragment of a small pot (*Pl.* 37. 1).
  - 5–7. Fragments of bowls with indrawn rim (*Pl.* 37. 2–4).
  8. Fragment of a biconical bowl (*Pl.* 37. 5).
  9. Fragment of the lower part of a flask (*Pl.* 38. 1).
  10. Fragment of a wheel model/spindle whorl (*Pl.* 38. 2).
  - 11–13. Rim fragments of various pots (*Pl.* 38. 3–5).
- Kalicz* (1970) 110, Site 14; *Bondár* (1995) 252; *Kalicz* (1995) 61.

**126. Lickóvadásos–Lickó-hegy (County Zala)**

Stray find (1991).

Shaft-hole axe.

*Horváth* (2001) Fig. 2. 1.

**127. Lovasberény (County Fejér)**

Stray find.

Two-handled Somogyvár-type amphora. Naturhistorisches Museum, Vienna. Unpublished.

*Bóna* (1965a) 44; *Bondár* (1995) 252.

<sup>1809</sup> I would here like to thank Nándor Kalicz for kindly allowing me to publish the finds.



**128. Lovasberény (County Fejér)**

Stray finds.

Six mugs and jugs, to which parallels can be quoted from both the Makó-Kosihy-Čaka (*Bándi* [1982] Abb. 12. 6, 7) and the Somogyvár-Vinkovci culture (*ibidem* Abb. 12. 8, 10–11), while one can be assigned to the Nagyrév culture (*ibidem* Abb. 12. 9).

*Bándi* (1982) 176, Abb. 12. 6–11.

**129. Magyarakeszi–Gubarci tető (County Tolna)**

Settlement.

Field survey (István Torma, 1963).

Vessel fragments from the Early Bronze Age.

*Torma* (1964) Site 160.

**130. Magyarszerdahely–Homoki-dűlő (County Zala)**

Settlement.

Excavation (László Horváth, 1971).

Pit.

*Horváth* (1994) 97; *Bondár* (1995) 252.

**131. Majs (County Baranya)**

Stray find.

Shaft-hole axe.

*Ecsedy* (1983a) 79, Pl. IX. 4, Pl. XIV. 4; *idem* (1990) 228, Fig. 11.

**\*132. Majs–294 Kossuth Lajos Street (County Baranya)**

Stray finds.

Two-handed jug, bowl with an incised channelling-like decoration and fragment of an interior decorated bowl. JPM inv. no. 76.4.1.1–3. Unpublished.

*Ecsedy* (1979a) 104, Abb. 5; *Bándi* (1979) 70; *Bondár* (1995) 252.

**133. Majs–Vuka Baba (County Baranya)**

Stray finds.

Flat bronze axe and a vessel fragment. JPM inv. no. Ö.73.9.1–2. Unpublished.

*Bándi* (1979) 71; *Bondár* (1995) 252.

**134. Mágocs–between Kispusztá and Falugyörgyi (County Baranya)**

Settlement.

Stray finds and field survey (Gábor Bándi).

Biconical jug decorated with incised zig-zag lines. JPM. Unpublished.

*Bóna* (1965a) 43; *Bándi* (1979) 71; *Ecsedy* (1979a) 104, Fo. 30; *Bondár* (1995) 252.

**\*135. Between Mernye and Somogyaszaló (County Somogy)**

Stray finds.

Interior decorated bowl fragments, spindle whorl/wheel model fragment, body fragments of pots with brushed decoration.

RRM Archaeological Archives no. 88/97. Eöry Béla Collection: Sites 41, 41.a.

**136. Monostorapáti (County Veszprém)**

Stray finds (burial ?).

Two Somogyvár–Vinkovci vessels. Unpublished.

MRT 1, 119, Site 30/\*\*\*, described as a burial: *Bondár* (1995) 252.

**137. Muraszemenye–Aligvári mező (County Zala)**

Settlement.

Salvage excavation (30,000 m<sup>2</sup>, Judit Kvassay, 1999–2001).

Unstratified pottery fragments.

*Vándor–Pusztá–Kvassay* (2002); *Kvassay* (2003).

**138. Nagyatád–Simongát (County Somogy)**

Stray finds.

Two vessels: a handled mug with tall, curved neck and a two-handed pot.

*Bóna* (1965a) 43, Fig. 1. 6–7; *Ecsedy* (1979a) Fo. 27, 104; *Bondár* (1995) 252.

**\*139. Nagyörbő–Várodtető (northern slope) (County Zala)**

Settlement.

Field survey (1964).

The fragment of an interior decorated bowl, the fragment of a bowl with thickened rim and the body fragment of a pot with brushed decoration was found during a field survey on the flat terrace adjoining the Várhegy.

MRT 3, 159, Site 39/2.

**\*140. Nagygörbő–Várodttető/Várhegy (County Zala)**

Fortified settlement.

Excavation (Gyula Nováki, 1961).

Fortified settlement made up of three parts: an oval, inner enclosure on the summit measuring 115 m x 85 m, flanked by an artificial terrace on the eastern side and an outer enclosure and an open area adjacent to the inner enclosure.

Two rim and body fragments of interior decorated bowls with chequerboard decoration (*Nováki* [1965] Fig. 5. 2–3).

*Nováki* (1965); MRT 3, 159, Site 39/1; *Ecsedy* (1979a) 105, Fo. 37; *Bondár* (1995) 252.

**\*141. Nagykanizsa–Inkey kápolna (County Zala)**

Settlement.

Excavation (6000 m<sup>2</sup>, László Horváth, 1979–1981, 1991).

20 features.

Three fragments of interior, exterior and rim decorated bowls with simple decoration.

*Horváth* (1983b) 12, Figs 4–5; *Kalicz–Schreiber* (1989) Abb. 3; *idem* (1991) Fig. 3; *Horváth* (1994) 95, Fig. 8; *Bondár* (1995) 253; *idem* (2003).

**\*142. Nagykanizsa–Palini halastó (County Zala)**

Settlement.

Field survey (László Horváth, 1976).

Fragments of interior decorated bowls. TGyM inv. no. 79.92.1–5. Unpublished.

*Horváth* (1994) 97; *Bondár* (1995) 253.

**\*143. Nagykanizsa–Palin, szociális otthon (County Zala)**

Settlement.

Salvage excavation (István Eke, 2004 (8550 m<sup>2</sup>), 2005–2006).

Several features, some yielding interior decorated bowl fragments.

*Eke* (2005); *idem* (2007).

**144. Nagykanizsa–Sánc (County Zala)**

Settlement.

Excavation (Nándor Kalicz, 1971 and 1975).<sup>1810</sup>

Pit. Selection of the finds:

1–2. Fragments of larger handled bowls (*Pl.* 39. 1–2).

3–6. Fragments of the upper parts of various pots (*Pl.* 40. 1–3, *Pl.* 41. 1).

7–8. Rim fragments of bowls with indrawn rim (*Pl.* 41. 2–3).

9. Tall pot (storage jar). H. 58.8 cm (*Pl.* 41. 4).

10. Tall pot (storage jar). H. 45 cm (*Pl.* 41. 5).

*Kalicz* (1976a) 149; *Bondár* (1995) 253.

**145. Nagykónyi (County Tolna)**

Settlement.

Field survey (István Torma, 1963).

Vessel fragments from the Early Bronze Age.

*Torma* (1964) Site 205/a.

**146. Nagykónyi (County Tolna)**

Settlement.

Field survey (István Torma, 1963).

Early Bronze Age and “Zók-type” pottery fragments with lime encrusted decoration.

*Torma* (1964) Site 284.

**147. Nagykónyi–Dózsa György Street (County Tolna)**

Settlement.

Field survey (Gyula Mészáros, 1964).

<sup>1810</sup> I would here like to thank Nándor Kalicz for kindly allowing me to publish the finds.



1. Rim fragment of a pot with folded out rim. WMM inv. no. 66.195.4.
  2. Fragment of a strap handle. WMM inv. no. 66. 195.1.
- 148. Nagyszokoly** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
Vessel fragments from the Early Bronze Age.  
*Torma* (1964) Site 318.
- \*149. Nagyvejke–Réti szántók-dűlő (Borsó-hegy)** (County Tolna)  
Settlement.  
Stray finds (József Ambrus, 1970; Ferenc Pincehelyi, 1973) and field surveys (Antal Csiszér, in the 1990s; Zsuzsa Miklós, in the 1990–2000s).<sup>1811</sup>
- a. Stray finds (József Ambrus, 1970).  
Vessels and vessel fragments. István Bóna regarded them as grave goods in view of their intact condition (*Bóna* [1972]). WMM inv. no. 70.1.1–16.
  - b. Stray finds (Ferenc Pincehelyi, 1973).
    1. Interior and rim decorated bowl with carelessly executed decoration. The surface is reddish-brown and has a dull finish. H. 8 cm, dR. 16 cm, dB. 6.3 cm. WMM inv. no. 73.137.2 (*Pl.* 47. 4).
    2. Fragment of an interior decorated bowl. WMM inv. no. 73.137.1.
  - c. Field survey (Antal Csiszér, 1997).
    1. Interior decorated bowl with a round, hollow foot bearing a pattern combining the rough stab-and-drag style with incised motifs in its interior. Patches of lime encrustation survive in the incisions. Light brown with grey and black burnt spots. H. 8.5–9.8 cm, dR. 16.2–16.7 cm, dB. 6.7–7 cm. Csiszér Antal Collection inv. no. 90/27 (*Pl.* 47. 3).
    2. Fragment of an interior decorated bowl with round, hollow foot. Decorated both on the rim and in the interior. The carelessly executed decoration is in the stab-and-drag style combined with incised motifs. Brownish-grey with reddish-brown burnt spots. H. 8.2 cm, dR. 17 cm, dB. 6 cm. Csiszér Antal Collection inv. no. 91/5 (*Pl.* 47. 2).
    3. Undecorated bowl with low, conical body and round, hollow foot. Greyish-brown. H. 5.3–7.2 cm, dR. 16 cm, dB. 5.5 cm. Csiszér Antal Collection inv. no. 91/6 (*Pl.* 47. 1).
    4. Shaft-hole axe of the Kozarac type. L. 13.1 cm, Weight: 320.44 gr (*Kulcsár* [1999b]; here *Pl.* 47. 5).
    - 5–8. Various small handled mugs and their fragments. H. 6–11 cm (*Pl.* 48. 1–3, 5).
    9. Small, conical bowl. H. 2.8 cm (*Pl.* 48. 4).
    10. Small, handled biconical bowl with a knob on the shoulder. H. 7 cm (*Pl.* 48. 6).
    11. Small handled vessel decorated with a cordon. H. 6 cm (*Pl.* 48. 7).
    12. Rim fragment of a bowl (*Pl.* 48. 8).
    - 13–14. Pot rim fragments (*Pl.* 48. 9–10).
    15. Shoulder fragment of a vessel with wavy cordon decoration (*Pl.* 48. 11).

*Bóna* (1972); *Kulcsár* (1999a) 115–116, Pl. I. 25–27; *idem* (1999b); *Miklós* (2007) 418–419, Figs 405–406.

**150. Olasz–Luka-dűlő** (County Baranya)

Settlement.  
Field survey (Rezső Pusztai, 1950).  
*Bándi* (1979a) 71; *Bondár* (1995) 253.

**151. Oltárc–Márkihegy** (County Zala)

Fortified (?) settlement.  
Field survey (László Horváth, 1980s).  
Vessel fragments of the Somogyvár–Vinkovci culture. TGyM inv. no. 79.173.1–10. Unpublished.  
*Horváth* (1994) 97; *Bondár* (1995) 253.

**\*152. Between Orci and Zimány** (County Somogy)

Stray finds.  
Rim fragment of an interior decorated bowl and body fragments of pots with brushed decoration.  
RRM Archaeological Archives no. 88/94; Eöry Béla Collection: Site 38.

<sup>1811</sup> I would here like to thank Antal Csiszér (Aparhant) for kindly allowing me to publish the finds.

- 153. Ordacsehi–Bugaszeg (M7 Motorway, Site S–29)** (County Somogy)  
 Settlement and inhumation burials.  
 Salvage excavations (89,500 m<sup>2</sup>, Szilvia Honti and others, 2000–2002).  
 Some pits and two inhumation burials without grave goods. Late Somogyvár–Vinkovci culture/proto-Kisapostag period.  
*Gallina et al.* (2002); *Kiss* (2003); *Sebők* (2003); *Gallina et al.* (2007); *K. Zoffmann* (2007) 311–312.
- \*154. Ordacsehi–Kécsimező** (County Somogy)  
 Settlement.  
 Salvage excavations (Péter Gergely Németh, in the 1990s; Judit Pásztókai–Szeőke and others, ca. 24,158 m<sup>2</sup> [2004], 2004–2005).  
 A few features: pits and a house (?). A jug, an amphora and an interior decorated bowl with red painting (!) was found in the house. Somogyvár–Vinkovci and late Somogyvár–Vinkovci/proto-Kisapostag period.  
*Németh* (1993); *Bondár* (1995) 253; *Pásztókai–Szeőke et al.* (2005); *idem* (2007).
- 155. Ordacsehi–Kis-töltés** (County Somogy)  
 Settlement.  
 Salvage excavation (21,500 m<sup>2</sup>, Gabriella Kulcsár, 2001).  
 A few features: pits and pit complexes.  
*Kulcsár* (2002b); *idem* (2003); *idem* (2007).
- \*156. Ostffyasszonyfa–Kavicsbánya** [gravel pit] (County Vas)  
 Settlement.  
 Small-scale rescue excavation (Gábor Ilon, 1996).  
 Traces of three timber-framed buildings with pits and post-holes. Somogyvár–Vinkovci and/or Makó–Kosihy–Čaka culture.  
*Piringer* (2000).
- 157. (Ajka–) Padragkút** (County Veszprém)  
 Stray find.  
 Handled jug.  
 MRT 3, 186, Site 47/9.
- \*158. Pamuk–Laskapuszta** (County Somogy)  
 Stray find.  
 Rim fragment of an interior decorated bowl. RRM inv. no. 55.42.1.
- 159. Pári** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1963).  
 Vessel fragments from the Early Bronze Age.  
*Torma* (1964) Site 65.
- 160. Pellérd–MÉV Ércdúsítóüzem** (County Baranya)  
 Settlement.  
 Field survey (István Ecsedy, 1979).  
*Ecsedy* (1981b).
- 161. Petrikeresztúr** (County Zala)  
 Settlement.  
 Stray find.  
 Fragment of a handled mug.  
*Müller* (1971) 39, Site 48, Pl. V. 7; *Bondár* (1995) 253.
- 162. Pécs–43–47 Jakabhegyi Road** (County Baranya)  
 Settlement.  
 Stray find. JPM inv. no. Ó.69.34.1–2. Unpublished.  
*Bándi* (1979) 71; *Bondár* (1995) 253.
- 163. Pécs–Keleti-hegy** (County Baranya)  
 Stray find.  
 Juhász Collection.  
 Small flask. H. 6.4 cm. JPM inv. no. 262. Unpublished.  
*Bóna* (1965a) 43; *Bándi* (1979) 71; *Ecsedy* (1979a) Fo. 31; *Bondár* (1995) 253.



**164. Pécs–Makárhegy** (County Baranya)

Settlement, stray finds.

Handled jug with an incised zig-zag pattern and a smaller handled biconical jug. JPM inv. no. 261/1–2.

*Patay* (1938) 23; *Banner* (1941a) 15, Pl. 2. 43–44; *idem* (1941b) 352, Pl. 3. 37–38; *Bóna* (1965a) 44, Pl. XVI. 1–2; *Bándi* (1979) 71; *Ecse*dy (1979a) 105; *Bondár* (1995) 253.

**165. Pécs–Málom-lőtér** (County Baranya)

Settlement.

Field survey (K. Kardhordó). Unpublished.

*Bándi* (1979) 71; *Bondár* (1995) 253.

**\*166. Pécs–Nagyárpád–Diósfető** (County Baranya)

Fortified (?) settlement and a burial.

a. Field surveys (Gyula Mészáros and Gyula Török), excavation (Gyula Török).

Five vessels were found:

1. Flask.
2. Tall jug with biconical body, decorated with linear patterns and knobs. HNM (*Bóna* [1965a] 44, Pl. XVI. 3–4).
3. Two-handled storage vessel with cylindrical neck.
4. Flask.
5. Storage jar decorated with a chequerboard/lattice pattern. JPM (*Bóna* [1965a] 44, without illustrations).

b. Excavation (10,000 m<sup>2</sup>, Gábor Bándi, 1963–1967).

Almost 200 features were identified, enabling a reconstruction of the settlement's internal layout (*Bándi* [1979] 64). An inner enclosure was identified in the settlement located on the triangular plateau. Only a selection of the finds was published.

Various fragments of interior, exterior and rim decorated bowls:

1. Interior decorated bowl with round hollow foot (Pit LXIX/γ), 2. small interior decorated bowl (Pit C/β), 3–6. various rim fragments (Pits LXXXVI/a, CIII/δ), 7–9. round hollow foot fragments (Pits CX/β), 10. undecorated bowl with round hollow foot (*Bándi* [1980] 83, Fig. 2. 1–13, Fig. 3. 1–10, Fig. 6. 21; *idem* [1981] Taf. 1. 1, 7, Taf. 2. 1–2, Taf. 5. 8, Taf. 7. 1, 4, Taf. 8. 21; *idem* [1984a] T. XXX. 4). *Bóna* (1965a) 44, Pl. XVI. 3–4; *Ecse*dy (1979a) 104, Fo. 11; *Bándi* (1979) 64, 71; *idem* (1980); *idem* (1981); *Ecse*dy (1983a) 79, 83, Fig. 45; *Bándi* (1984a); *Ecse*dy (1990) 227–228, Fig. 10; *Bondár* (1995) 253.

c. Gábor Bándi mentioned a burial. Unpublished.

*Bándi* (1968a) 74, Anm. 22.

**167. Pécs–Üszögpusztai (Tűzköves)** (County Baranya)

Settlement.

Field survey (Rezső Pusztai, 1950).

*Bándi* (1979) 71; *Bondár* (1995) 253.

**168. Pécsudvard–Babos-dűlő** (County Baranya)

Settlement.

Field survey (Rezső Pusztai, 1950).

*Bándi* (1979) 71; *Bondár* (1995) 253.

**169. Pécsvárad** (County Baranya)

Stray finds.

Four vessels. JPM inv. no. 7118/1–4.

1. Pot. H. 16 cm.
2. Handled jug. H. 14 cm.
3. Biconical bowl.
4. Small mug.

István Bóna later assigned the finds to the Makó–Kosihy–Čaka culture (*Bóna* [1972] 10, note 43).

*Bóna* (1965a) 43, Pl. XVI. 14–17; *Ecse*dy (1979a) 104, Fo. 8; *Bándi* (1979) 71; *Bondár* (1995) 253.

**170. Pinchehely** (County Tolna)

Settlement.

Field survey (István Torma, 1963).

- Vessel fragments from the Early Bronze Age (“Zók–Vučedol culture” ?). Unpublished.  
*Torma* (1964) Site 19.
- 171. Pincehely** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1963).  
 Vessel fragments from the Early Bronze Age (“Zók–Vučedol culture” ?). Unpublished.  
*Torma* (1964) Site 180.
- 172. Pincehely–Tamási útra-dűlő** (County Tolna)  
 Fortified (?) settlement.  
 Field survey, aerial site survey (Zsuzsa Miklós, 1990–2000s).  
 The size of the fortified area on the hill rising above the floodplain of the River Kapos is approximately 120 m x 90 m.  
*Miklós* (2007) 105–108.
- \*173. Polány** (County Somogy)  
 Settlement.  
 Small-scale rescue excavation (Edith Bárdos, Szilvia Honti, 1980).  
 Partially excavated pit.
1. Small conical bowl with a small knob on its rim. H. 3.3 cm, dB. 3.2 cm, dR. 6.5 cm (*Pl. 31. 1*).
  2. Small conical bowl. H. 2.3 cm, dB. 4 x 3.5 cm, dR. 6 cm (*Pl. 31. 2*).
  3. Low, cross shaped foot fragment of an interior decorated bowl. H. 2 cm, dB. 4.5 cm (*Pl. 31. 3*).
  4. Round, hollow foot fragment of an interior decorated bowl. dB. 5–6 cm (*Pl. 31. 4*).
  5. Body fragment of an interior decorated bowl (*Pl. 31. 5*).
  6. Body fragment of a vessel decorated with a small knob and a pattern in the stab-and-drag style (*Pl. 31. 6*).
  7. Basal fragment of a cylindrical flask decorated with punctates between a pair of incised lines. dB. 8.5 cm (*Pl. 31. 7*).
  8. Basal fragment of a small flask. dB. 4 x 4.5 cm (*Pl. 31. 8*).
  9. Basal fragment of a vessel with cylindrical body (*Pl. 31. 9*).
  10. Fragment of a bowl with everted, thickened rim and conical shoulder (*Pl. 31. 10*).
  11. Rim fragment of a pot with folded out rim (*Pl. 32. 1*).
  12. Knob decorated shoulder fragment of a pot (*Pl. 32. 2*).
  13. Deep biconical bowl. Four longish ledge handles are set on the shoulder. A lattice pattern of combed bundles of lines covers the lower part under the shoulder. H. 24 cm, dR. 40 cm (*Pl. 32. 3*).
  14. Round, biconical spindle whorl. Diam. 4.7–5 cm (*Pl. 32. 4*).
  15. Fragment of a flat spindle whorl. Diam. 5.2 cm (*Pl. 32. 5*).
  16. Flat, biconical spindle whorl. Diam. 5–5.2 cm (*Pl. 32. 6*).
  17. Fragment of a wheel model/spindle whorl. Diam. 3.5 x 2 cm (*Pl. 32. 7*).
  18. Fragment of a cylindrical clay loom-weight/sinker. H. 6 cm, dB. 4 cm (*Pl. 32. 8*).
  19. Fragment of a stone axe. L. 5 cm (*Pl. 32. 9*).
- RRM Archaeological Archives.
- 174. Pókaszeptk** (County Zala)  
 Settlement.  
 Excavation (József Csalog).  
 István Bóna assigned two vessels from among the prehistoric finds to the Somogyvár–Vinkovci culture: a handled jug and a fragment of a larger storage vessel with cylindrical neck. Later Bóna classified them as Makó–Kosihy–Čaka finds, cp. *Bóna* (1972) 10, note 43.  
*Bóna* (1965a) 42, Pl. XIV. 8, 12; *Ecsedy* (1979a) Fo. 22, Abb. 6; *Kalicz-Schreiber* (1991) Fig. 6. 4; *Bondár* (1995) 253.
- 175. Pusztaszemes** (County Somogy)  
 Stray find.  
 Vessel fragment from the Early Bronze Age.  
 RRM Archaeological Archives no. 88/115; Eőry Béla Collection: Site 14.
- 176. Rajka–Modrovich-pusztá** (County Győr-Moson-Sopron)  
 Tumulus burial (cremation ?).  
 Excavation (1871).



Eight vessels and a whetstone were found in the tumulus (H. 2.6 m, Diam. 66 m) at various depths. The rite of the first burial over which the mound was raised is unknown. It is possible that the finds are not all grave goods, but also represent later funerary offerings.

*Patay* (1938) 63, T. IX. 1 (one stray vessel find); *Bóna* (1965a) 41, Pl. XII. 11; *Figler* (1994) 22, 26–27, 25, Fo. 29, Abb. 9; *Bondár* (1995) 252.

**177. Ravazd–Villibald domb** (County Győr-Moson-Sopron)

Settlement.

Excavation (*András Figler*, 1984).

A few features and the mould of a Kozarac type shaft-hole axe and a late Somogyvár–Vinkovci jug were found. XJM. Unpublished.

*Figler* (1985); *Kalicz–Schreiber* (1991) 10; *Figler* (1994) 25, Fo. 30, Fig. 2; *Bondár* (1995) 252.

**\*178. Regöly** (County Tolna)

Stray finds.

a. Téry Emil Collection.

Round, hollow foot fragment of an interior and exterior decorated bowl. H. 5.9 cm, dB. 5.8 cm. WMM inv. no. 58.173.1 (*Csalog* [1941] 8, Pl. III. 5; here *Pl. 52. 5*).

b. Vessel (“presented from Regöly”).

Handled jug with cylindrical neck and curved, conical shoulder. H. 10.6 cm, dR. 9 cm, dB. 6 cm. WMM inv. no. 60.246.1 (*Pl. 52. 7*).

**179. Sand** (County Zala)

Settlement.

Field survey.

Rim fragment of a pot. TGyM inv. no. 89.52.16. Unpublished.

HAS AI Archives.

**180. Ságvár–Ali rét** (County Somogy)

Settlement.

Excavation (500 m<sup>2</sup>, Szilvia Honti, 1979).

Unstratified finds from the Early Bronze Age were found on the settlement of the Lengyel and Urnfield cultures. Unpublished.

*Honti* (1980).

**181. Ságvár–Tömlöchegy** (County Somogy)

Settlement.

Field survey (*Harri Weigell*).

Body fragments of pots with brushed decoration.

RRM inv. no. Ö.97.11.56–57.

**182. Sármellék–Fenéki Road** (County Zala)

Stray finds.

Handled jug with cylindrical neck and a smaller mug.

*Bóna* (1965a) 42, Pl. XIV. 4, 7; MRT 1, 139, Site 40/\*\*\*, Pl. 7. 6, 8; *Ecsedy* (1979a) 104, Fo. 21; *Kalicz–Schreiber* (1991) 10, Fig. 5. 3–4 (as Keszthely–Fenékpusztá); *Bondár* (1996b) 53, Site 62.

**183. Sármellék–Between the road and the railway** (County Zala)

Settlement.

Field survey.

Vessel fragments from the Early Bronze Age.

MRT 1, 139, Site 40/11; *Bondár* (1989) 35, Fo. 16.; *idem* (1995) 253; *idem* (1996b) 53, Site 68.

**184. Sármellék–Zalavári-hát** (County Zala)

Settlement.

Field survey (1964).

Vessel fragments from the Early Bronze Age.

MRT 1, 139, Site 40/12; *Bondár* (1989) 35, Fo. 16; *idem* (1996b) 53, Site 68; *idem* (1995) 253.

**185. Sátorhely–Törökdomb** (County Baranya)

Settlement.

Field survey.

Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.77.24.1–2. Unpublished.

*Bándi* (1979) 71; *Bondár* (1995) 253.

**186. Sávolý–Nyírfássziget** (County Somogy)

Settlement.

Small-scale rescue excavation (Szilvia Honti, Péter Gergely Németh, 1993).

Body fragments of a Somogyvár–Vinkovci pot with rusticated surface were unearthed from a circular ditch.

*Bondár* (1996b) 53, Site 166.

**187. Sávolý–Simonsziget** (County Somogy)

Settlement.

Pot fragments were found in a small section of a Somogyvár–Vinkovci ditch.

RRM Archaeological Archives.

**\*188. Sé–Malomi-dűlő** (County Vas)

Settlement.

Excavation (Nándor Kalicz, Mária Károlyi, 1975–1976.)

A few features. Vučedol C and early Somogyvár–Vinkovci culture. Only a selection of the finds was published.

Two fragments of interior decorated bowls:

1. Body fragment decorated with an excised, lime encrusted zig-zag line and a Maltese cross-like motif.
2. Body fragment with a similar excised pattern.

*Kalicz–Károlyi* (1977); *idem* (1978); *idem* (1980); *Kalicz–Schreiber* (1989) Fig. 2, *idem* (1991) 9, Fig. 2. 6, 7; *Bondár* (1995) 253.

**189. Sénye–Csippán** (County Zala)

Settlement.

Field survey (Jolán Horváth, 1967–69).

Rim fragment of a pot with folded out rim.

HAS AI Archives, photo no. 52.781.

**190. Siklós–Göntér** (County Baranya)

Settlement.

Field survey.

Vessel body fragments from the Early Bronze Age.

*Bándi* (1979) 71; *Bondár* (1995) 253.

**\*191. Simontornya–MÁV homokbánya** (County Tolna)

Stray find.

Kiss István Collection (Simontornya, 1939).

Round, hollow foot fragment of an interior decorated bowl. H. 5 cm. WMM inv. no. 89.37.1 (*Csalog* [1941] 8, Pl. III. 1).

**192. Sióagárd–Leányvár** (County Tolna)

Settlement.

Field survey (Zsófia Medzihradsky, Zsuzsa Miklós, István Torma, 1982).

Rim fragments of pots and body fragments of pots with brushed and rusticated surface.

WMM inv. no. 85.21.2–7.

**193. Siófok–Balatonkiliti–South of the Lake Békás** (County Somogy)

Settlement.

Field survey (Péter Gergely Németh, 1992)

RRM Archaeological Archives.

**194. Somberek–Szőlő** (County Baranya)

Settlement.

Field survey.

Vessel body fragments from the Early Bronze Age. JPM inv. no. Ő.72.44.1–2. Unpublished.

*Bándi* (1979) 71; *Bondár* (1995) 253.

**\*195. Somlóhegy–Séd-forrás** (County Veszprém)

Stray finds.

Darnay Kálmán Collection.

Round, hollow foot fragment of an interior decorated bowl (MRT 3, 213, Pl. 18. 6) and fragment of the lower part of a handled mug (MRT 3, Pl. 21. 1).

MRT 3, 213, Pl. 18. 6, Pl. 21. 1; *Ecsedy* (1979a) 105.



**\*196. Somogygeszti (County Somogy)**

Settlement.

Field survey (Imre Stammer, 1990).

Rim fragments of interior decorated bowls, rim fragments of pots with folded out rim and bowl fragments.

RRM inv. no. —. *Fekete et al.* (2005) 95, Fig. 2.

**197. Somogyszil–Alsómarosd (County Somogy)**

Settlement.

Field survey (1990).

RRM Archaeological Archives no. Site 1/2.

**\* 198. Somogyvár–Kupavárhegy (County Somogy)**

Settlement (probably fortified) (*Pl.* 5).

Somogyvár is located approximately 20 km from the current southern shoreline of Lake Balaton. The three hectares large plateau of the 170 m high Kupavárhegy is enclosed by ramparts on the eastern, northern and western side. The hill lay in the midst of the marshland of Nagyberki–Balaton, which was drained at the beginning of the 19th century.

**a. Stray finds (1926, 1928, 1929; *Pls* 6–7)**

*Banner* (1941b) 350, *Pl.* 1. 7, 11; *idem* (1942) 83–84, Fig. 2. 2; *idem* (1956) 27, *Taf.* 9. 2–3; *Bóna* (1965a) 39–40, *Pl.* X, *Pl.* XI, *Pl.* XII. 5–6; *Ecsegy* (1979a) 104; *Bondár* (1995) 254.

**b. Excavations (Kornél Bakay, 1972–1988, 2000s).<sup>1812</sup>**

*Bakay* (1975); *Honti* (1994a) 6; *idem* (1994b); *Bakay* (1997); *idem* (2004).

Traces of Bronze Age (Vučedol, Somogyvár–Vinkovci, Transdanubian Encrusted Pottery, Urnfield culture) occupation were found at the site. Unfortunately, the prehistoric levels were disturbed during the construction of the church and the Benedictine abbey in the 11th century and thus very few closed pits or intact levels remained.

Twenty-five trenches of varying size were opened to explore the site of the Benedictine abbey (Trenches I–XXV), all of which yielded a rich variety of prehistoric finds. These finds were separated according to the depth they were recovered from. According to the excavation reports, there were no Early Bronze Age features in these trenches.

Presented in the following is a selection of the finds (*Pls* 8–29).

**Trench VII**

*Between 35 and 0 cm:*

1. Fragment of a small handled pot. RRM inv. no. 3976/83 (*Pl.* 9. 10).

**Trench X**

*Between 100 and 0 cm:*

1. Rim fragment of an interior decorated bowl. RRM inv. no. 60/86.
2. Rim fragment of a pot. RRM inv. no. 62/86.

**Trench XIII**

*Between -100 and -160 cm:*

1. Basal fragments of an interior decorated bowl. RRM inv. no. 1860–1861/86.
2. Folded out rim fragment of a pot. RRM inv. no. 1845/86.
3. Body fragment of a vessel with rib decoration. RRM inv. no. 1803/86.
- 4–7. Body and basal fragments of pots with rusticated surface. RRM inv. no. 1807–1808, 1826, 1876/86.
- 8–9. Body fragments of handled storage vessels. RRM inv. no. 1836, 1838/86, RRM inv. no. 1799–1882/86.

*Moat/between -160 and -340 cm:*

1. Folded out rim fragment of a pot. RRM inv. no. 3753/86 (*Pl.* 9. 11).
2. Round hollow foot fragment of an interior decorated bowl. RRM inv. no. 9084/86 (*Pl.* 9. 12).

<sup>1812</sup> The prehistoric finds were initially given to Szilvia Honti for evaluation and publication. I am greatly indebted to her for kindly allowing me to study and publish the finds. A detailed report on the findings of the excavations at Somogyvár will be published by Kornél Bakay.

#### **Trench XIV**

*Between 70 and 10 cm:*

1. Rim fragment of a pot. RRM inv. no. 9724/88 (*Pl. 9. 13*).
2. Body fragment of a storage vessel with strap handle. RRM inv. no. 9720/88 (*Pl. 9. 14*).
3. Rim fragment of an interior decorated bowl. RRM inv. no. 9731/88.

*Between 70 and 20 cm:*

1. Low, round basal fragment of a vessel with two symmetrically drilled holes on the edge. RRM inv. no. 3124/86 (*Pl. 9. 15*).
2. Rim fragment of a bowl. RRM inv. no. 3112/86 (*Pl. 9. 16*).
3. Basal fragment of a flask. RRM inv. no. 3120/86 (*Pl. 9. 17*).

#### **Trench XV**

*Between 125 and 80 cm:*

1. Rim fragment of a small bowl. RRM inv. no. 4547/86.
2. Body fragment of an interior decorated bowl. RRM inv. no. 4525/86.

*Between 60 and 20 cm:*

1. Rim fragment of a pot. RRM inv. no. 6592/86 (*Pl. 10. 1*).
2. Body fragment of a jug decorated with a triangular bundle of lines in the stab-and-drag style. RRM inv. no. 6209/86 (*Pl. 10. 2*).
3. Bowl fragment decorated with a crescentic rib. RRM inv. no. 6307/86 (*Pl. 10. 3*).

*Between 45 and 10 cm:*

1. Rim fragment of a bowl. RRM inv. no. 7853/86 (*Pl. 9. 18*).
2. Rim fragment of an interior, exterior and rim decorated bowl, decorated with a linear pattern in the stab-and-drag style and an excised triangular pattern. A small knob is set on the exterior. RRM inv. no. 7555/86 (*Pl. 9. 19*).

*From the fill of an oven with unknown age:*

1. Rim fragment of a pot. RRM inv. no. 8501/86 (*Pl. 10. 4*).
2. Folded out rim fragment of a pot. RRM inv. no. 6461/86.
3. Body fragment of a vessel decorated with a lime encrusted pattern of triangles and circles in the stab-and-drag style. RRM inv. no. 8523/86 (*Pl. 10. 5*).
4. Body fragment of a handled bowl decorated with a hatched triangle set a lime encrusted frame made in the stab-and-drag style. RRM inv. no. 6478/86 (*Pl. 10. 6*).

#### **Trench XVI**

*Between 165 and 75 cm:*

1. Rim fragment of a bowl. RRM inv. no. 7318/86 (*Pl. 10. 7*).
2. Basal fragment of a bowl decorated with combed bundles of lines. RRM inv. no. 7316/86 (*Pl. 10. 8*).
3. Rim fragment of a pot. RRM inv. no. 7309/86.

#### **Trench XVII**

A larger number of late Vučedol, Somogyvár–Vinkovci finds were recovered from this trench. Pits 8/a, 14, 15, and 16 yielded mostly Early Bronze Age finds. A detailed description of the pits is not available.

*Between 115 and 75 cm:*

Somogyvár–Vinkovci vessel fragments. RRM inv. no. 8230–8241/86.

*Pit 8/a, at 75 cm:*

Vučedol and Somogyvár–Vinkovci vessel fragments. RRM inv. no. 9428–9431/86.

*Between 45 and 10 cm:*

1. Low, solid, cross shaped foot fragment of an interior decorated bowl. The foot is decorated with a lime encrusted cross motif in the excised and stab-and-drag style. RRM inv. no. 9447/86 (*Pl. 11. 1*).
2. Fragment of a handled jug. RRM inv. no. 9443/86 (*Pl. 11. 2*).
3. Rim fragment of a handled bowl with conical body. RRM inv. no. 9444/86 (*Pl. 11. 3*).
4. Folded out rim fragment of a pot. RRM inv. no. 9464/86.
5. Body fragment of a pot with rusticated surface. RRM inv. no. 9446/86.

*Pit 14:*

1. Rim fragment of a pot with a small knob on the neck. RRM inv. no. 9622/86 (*Pl. 10. 9*).
2. Rim fragment of a handled bowl. RRM inv. no. 9611/86 (*Pl. 10. 10*).
3. Rim fragment of a small pot. RRM inv. no. 9635/86 (*Pl. 10. 11*).



4. Fragment of a bowl with a small, pointed knob ringed by an incised double line on the shoulder. RRM inv. no. 9617/86 (*Pl. 10. 12*).
5. Fragment of a handled bowl. RRM inv. no. 9618/86 (*Pl. 10. 13*).
6. Fragment of a jug with a small knob on the carination and a pattern of incised bundles of lines. RRM inv. no. 9604/86 (*Pl. 10. 14*).
7. Body fragment of a jug decorated with a wide, incised triple zig-zag line. RRM inv. no. 9634/86 (*Pl. 10. 15*).
8. Fragment of a jug with a curved, conical neck, decorated with incised bundles of lines. RRM inv. no. 9621, 9626, 9630/86 (*Pl. 10. 16*).
9. Body fragment of a jug with bundles of lime encrusted zig-zag lines, in part incised and in part in the stab-and-drag style. RRM inv. no. 9648/86 (*Pl. 10. 17*).
10. Fragment of a jug decorated with concentric circles in the stab-and-drag style. RRM inv. no. 9631/86 (*Pl. 10. 18*).

*Pit 15:*

- 1–2. Rim and body fragments of interior and exterior decorated bowls. RRM inv. no. 9701, 9723/86.
- 3–4. Bowl fragments. RRM inv. no. 9708, 9683/86.
- 5–9. Pot fragments. RRM inv. no. 9694, 9703, 9711, 9729, 9730/86.
10. Body fragment of a handled storage vessel. RRM inv. no. 9687/86.

*Pit 16:*

1. Fragment of thin-walled pot with impressions. RRM inv. no. 9751, 9754, 9759/86 (*Pl. 10. 19*).

**Trench XVIII**

*Between -330 and -430 cm:*

1. Fragment of a biconical spindle whorl. RRM inv. no. 3914/87 (*Pl. 10. 20*).

**Trench XVIII/A**

*Between -100 and -160 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl. The lime encrusted design was made in the stab-and-drag style. RRM inv. no. 9838/86 (*Pl. 11. 4*).
2. Fragment of a bowl with a small handle on the shoulder, decorated with an incised triple zig-zag line. RRM inv. no. 9832/86 (*Pl. 11. 5*).
3. Body fragment of a bowl with combed decoration. RRM inv. no. 9844/86.
4. Body fragment of a pot. RRM inv. no. 9847/86.

*Between -160 and -300 cm:*

Indistinct Somogyvár–Vinkovci fragments.

**Trench XVIII/B**

*Between 0 and -35 cm, between -35 and -100 cm:*

Indistinct Somogyvár–Vinkovci fragments.

**Trench XX**

*Between 200 and 150 cm:*

1. Shoulder fragment of a bowl. The lower part of the bowl is decorated with a combed pattern and a small knob on the carination. RRM inv. no. 11537/86 (*Pl. 11. 6*).

*Between 150 and 130 cm, 90 and 60 cm, 60 and 30 cm, 30 and 30 cm:*

1. Rim fragment. RRM inv. no. 1455/87.
2. Indistinct Somogyvár–Vinkovci fragments.

**Trench XXI**

*Between 200 and 160 cm:*

1. Bowl fragment with indrawn rim. RRM inv. no. 3563/87 (*Pl. 11. 12*).
2. Fragment of a small, conical bowl. RRM inv. no. 3540/87 (*Pl. 11. 13*).
3. Rim fragment of a pot. A small finger-impressed knob is set on the rim. RRM inv. no. 3555/87 (*Pl. 11. 14*).

*Between 145 and 20 cm:*

Indistinct Somogyvár–Vinkovci fragments.

*Between 145 and 80 cm:*

1. Body fragment of an interior and exterior decorated bowl. RRM inv. no. 4227/87 (*Pl. 11. 8*).

*Between 145 and -20 cm:*

1. Fragment of an interior, exterior and rim decorated bowl. RRM inv. no. 4562/87 (*Pl. 11. 9*).
2. Small body fragment of an interior decorated bowl. RRM inv. no. 4563/87.

*Between 110 and -40 cm:*

1. Basal fragment of a cylindrical flask. RRM inv. no. 3396/88 (*Pl. 11. 7*).
2. Body fragment of a jug. RRM inv. no. 3391/88.

*Between 100 and 10 cm, 100 and -80 cm, 40 and -40 cm, 0 and -70 cm:*

Indistinct Somogyvár–Vinkovci finds.

*Moat, between 145 and -40 cm:*

1. Rim fragment of a pot with curved neck. RRM inv. no. 4822/88 (*Pl. 11. 10*).
2. Fragment of a bowl decorated with lime encrusted bundles of lines in the stab-and-drag style on the shoulder. RRM inv. no. 4841/87 (*Pl. 11. 11*).
3. Folded out rim fragment of a pot. RRM inv. no. 4822/88.
4. Thickened rim fragment of a pot. RRM inv. no. 4884/88.

## **Trench XXII**

*Between 120 and -150 cm, 90 and 0 cm, 0 and -50 cm:*

Indistinct Somogyvár–Vinkovci finds.

*Between 90 and 10 cm:*

1. Rim fragment of a handled jug. RRM inv. no. 3616/87 (*Pl. 12. 1*).
2. Body fragment of a bowl with a dotted line pattern on the handle. RRM inv. no. 3623/87 (*Pl. 12. 2*).
3. Body fragment of a bowl with a small, decorated handle. RRM inv. no. 3620/87 (*Pl. 12. 3*).

*From the fill of the medieval ditch, unstratified find:*

1. Body fragment of an interior and exterior decorated bowl. Late Vučedol-like decoration in the stab-and-drag and excised styles. RRM inv. no. 86/88 (*Pl. 12. 4*).

## **Trench XXIII**

*Between -100 and -185 cm, -100 and -175 cm:*

Indistinct Somogyvár–Vinkovci finds.

*Unstratified find*

1. Fragment of a bowl with handle on the shoulder. RRM inv. no. 5252/88 (*Pl. 12. 5*).

## **Trench XXIV**

*Between 100 and 40 cm:*

1. Rim fragment of an interior and rim decorated bowl. RRM inv. no. 1765/88.

*Between 70 and 0 cm:*

1. Rim fragment of a handled jug. RRM inv. no. 2047/88.

*Between 20 and 0 cm:*

1. Fragment of a small handled pot. RRM inv. no. 2349/88 (*Pl. 12. 6*).

## **Trench XXIV/A**

*Between 30 and 70 cm:*

1. Fragment of a small handled pot. RRM inv. no. 2396/88 (*Pl. 12. 7*).

*Pit, details not specified:*

1. Folded out rim fragment of a pot. RRM inv. no. 2609/88 (*Pl. 12. 8*).

## **Trench XXV**

*Between 100 and 70 cm, 100 and 0 cm:*

Indistinct Somogyvár–Vinkovci finds.

*Between 70 and 10 cm:*

1. Rim fragment of a handled jug decorated with a lime encrusted linear design in the stab-and-drag style under the rim and on the handle. RRM inv. no. 5092/88 (*Pl. 12. 9*).
2. Body fragment of a handled pot. RRM inv. no. 5085/88.
3. Rim fragment of a pot. RRM inv. no. 5090/88.
4. Body fragment of a pot with a finger impressed rib. RRM inv. no. 5085/88.



## **Trench XXV/K**

*Between 0 and -60 cm:*

1. Decorated, round, hollow foot fragment of an interior decorated bowl. RRM inv. no. 6340/88 (*Pl. 12. 10*).

*Between -60 and -120 cm:*

1. Rim fragment of a small, handled pot. RRM inv. no. 7150/88 (*Pl. 12. 11*).
2. Small handled pot decorated with two pairs of three symmetrically set knobs on the shoulder. The vessel body underneath the knobs is rusticated. H. 15 cm. RRM inv. no. 7121/88 (*Pl. 12. 12*).
3. Basal fragment of a mug. RRM inv. no. 7137/88 (*Pl. 12. 13*).
4. Body fragment of a storage vessel with strap handle. RRM inv. no. 7124/88 (*Pl. 12. 14*).
5. Body fragment of a pot with impressed decoration. RRM inv. no. 7131/88 (*Pl. 12. 15*).
6. Rim fragment of a bowl. RRM inv. no. 7127/88 (*Pl. 12. 16*).
- 7–8. Rim fragments of various handled bowls. RRM inv. no. 7142, 7157/88.

*Between -120 and -160 cm:*

1. Fragment of a handled mug with curved, narrow neck. RRM inv. no. 8086/88 (*Pl. 13. 1*).
2. Fragment of a handled mug with curved, narrow neck. RRM inv. no. 8106/88 (*Pl. 13. 2*).
3. Folded out rim fragment of a pot. RRM inv. no. 7553/88 (*Pl. 13. 3*).
4. Fragment of a handled bowl with indrawn rim. RRM inv. no. 8104/88.
- 5–9. Rim fragments and rusticated surface body fragments of various pots. RRM inv. no. 8075, 7550, 8093, 9119/88.

*Between -200 and -270 cm:*

1. Fragment of a large spindle whorl/wheel model with raised ridge around the perforation. Diam. 5 cm. RRM inv. no. 9076 (*Pl. 13. 5*).

*Northern ditch, between -200 and -300 cm:*

1. Rim fragment of an interior and exterior decorated bowl. RRM inv. no. 9167/88.
2. Rim fragment of a handled bowl. RRM inv. no. 9163/88.
3. Basal fragment of a bowl decorated with a combed pattern on the lower half. RRM inv. no. 9172/88.
4. Rim fragment of a pot. RRM inv. no. 9177/88.
5. Folded out rim fragment of a pot. RRM inv. no. 9165/88.

*Unstratified finds:*

1. Rim fragment of a handled bowl. RRM inv. no. 7117/88 (*Pl. 13. 8*).
2. Rim fragment of an interior, exterior and rim decorated bowl decorated with a finely incised linear pattern in the stab-and-drag and the excised style; patches of the lime encrustation survive. RRM inv. no. 7114/88 (*Pl. 13. 9, Pl. 27. 1*).
3. Rim fragment of a handled bowl. RRM inv. no. 7119/88 (*Pl. 13. 10*).
4. Fragment of a jug decorated with a triangular and linear pattern in the stab-and-drag style on the shoulder. RRM inv. no. 7122, 7116, 7115/88 (*Pl. 13. 11, Pl. 27. 2*).
5. Fragment of a jug decorated with a triangular pattern in the stab-and-drag style on the shoulder. RRM inv. no. 7128/88 (*Pl. 14. 1*).

## **Trench XXV/K–P**

*Between -350 and -450 cm:*

1. Rim fragment of a pot with a small knob on the shoulder. RRM inv. no. 9936/88 (*Pl. 13. 4*).
2. Rim fragment of an interior and exterior decorated bowl. RRM inv. no. 9971/88 (*Pl. 13. 6*).
3. Rim fragment of a vessel with cylindrical neck. RRM inv. no. 9937, 9963/88 (*Pl. 13. 7*).

*Unstratified finds:*

1. Low, hollow, cross-shaped foot fragment of an interior and exterior decorated bowl. The bowl is decorated with a linear pattern in the stab-and-drag style. RRM inv. no. – (*Pl. 14. 5*).

## **Trenches in the abbey's courtyard and in the basilica**

The prehistoric finds from the trenches opened in the abbey's courtyard (25 m x 24 m) and in the basilica are described among the finds from Trenches D, Du and ÉH, DH, T1 in the field reports and other excavation documents.

### **Trench D-1/2**

*Between -40 and -105 cm:*

1. Short, round, hollow foot fragment of an interior decorated bowl. The foot is decorated with hatched triangles and a dotted line. dB. 5 cm. RRM inv. no. 1492/86 (*Pl. 14. 2*).
2. Fragment of a vessel with cylindrical neck. RRM inv. no. 504/86 (*Pl. 14. 3*).
3. Body fragment of a vessel with rib decoration. RRM inv. no. 656/86 (*Pl. 14. 4*).
4. Rim fragment of an interior decorated bowl. RRM inv. no. 517/86.
5. Rim fragment of a handled jug. RRM inv. no. 587/86.
6. Folded out rim fragment of a pot. RRM inv. no. 618/86.

### **Trench Du-3**

*Between -80 and -115 cm:*

1. Rim fragment of a jug decorated with a linear pattern in the stab-and-drag style on the neck. RRM inv. no. 2269/86 (*Pl. 14. 6*).
2. Body fragment of a bowl with a small knob on the shoulder and a combed pattern underneath it. RRM inv. no. 2245/86 (*Pl. 14. 7*).
3. Body fragment of a pot decorated with round impressions. RRM inv. no. 2273/86 (*Pl. 14. 8*).
4. Fragment of a jug with triple line pattern on the shoulder. RRM inv. no. 2228/86 (*Pl. 14. 9*).

*Between -115 and -155 cm:*

Indistinct Somogyvár–Vinkovci finds.

### **Trench Du-4**

*Between -45 and -105 cm:*

1. Rim fragment of a bowl. RRM inv. no. 4207/86.
2. Fragment of a jug. RRM inv. no. 5808/86.
3. Rim fragment of a pot. RRM inv. no. 5802/86, 4161, 4168/86.
5. Body fragment of a pot with brushed decoration. RRM inv. no. 5844/86.

### **Trench D-4**

*Between 210 and 195 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl. RRM inv. no. 2245/83.

### **Fill of Trench Du (1976)**

*At -82 cm:*

1. Neck fragment of a jug or flask with cylindrical neck decorated with two small knobs under the rim. RRM inv. no. 22 669 (*Pl. 14. 11*).
2. Body fragment of a biconical jug. RRM inv. no. 22 670 (*Pl. 14. 12*).
3. Fragment of a reddish-brown, polished vessel with rounded body and cylindrical neck. dR. 10 cm. RRM inv. no. 22 671 (*Pl. 14. 13*).

*Unstratified finds:*

1. Rim fragment of an interior, exterior and rim decorated bowl with a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 12265 (*Pl. 15. 1, Pl. 27. 4*).
2. Rim fragment of an interior and exterior decorated bowl with a lime encrusted linear pattern in the stab-and-drag style. RRM inv. no. 122270, 12898 (*Pl. 15. 2, Pl. 27. 3*).

### **Trench ÉH-4 (1973)**

*Between 170 and 220 cm:*

1. Rim fragment of an interior and rim decorated thick-walled bowl with a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 4932; 74.479.1 (*Pl. 14. 10*).
2. Fragment of a pot with a knob on the rim. RRM inv. no. 4942; 74.479.15 (*Pl. 15. 3*).
3. Fragment of a handled jug. A fluted line encircles the carination. RRM inv. no. 4976; 74.476.16 (*Pl. 15. 4*).
4. Fragment of a handled pot with cylindrical neck. RRM inv. no. 4949 (*Pl. 15. 5*).
5. Body fragment decorated with concentric ribs. RRM inv. no. 4943; 74.479.24 (*Pl. 15. 6*).

*Between 149 and 105 cm:*

1. Rim fragment of an interior decorated bowl with a classical incised chequerboard pattern in the stab-and-drag style in its interior. RRM inv. no. 74.481.1 (*Pl. 15. 7, Pl. 29. 2*).



### **Trench DH–2–3 (1980)**

*Between -95 and -115 cm:*

1. Rim fragment of an interior and exterior decorated bowl with an incised linear pattern in the stab-and-drag style. RRM inv. no. 66 (*Pl. 15. 9*).

*Between -100 and -120 cm:*

1. Rim fragment of an interior decorated bowl bearing a carelessly executed design. RRM inv. no. 101 (*Pl. 15. 8, Pl. 29. 4*).

*Between -125 and -140 cm:*

1. Fragment of the lower part of an interior decorated bowl. RRM inv. no. 183.
2. Body fragment of a pot decorated with round impressions. RRM inv. no. 186.

### **Trench DH–2–4**

*Between -60 and 100 cm:*

1. Fragment of a bowl decorated with a bundle of fluted lines and a small knob on the shoulder. RRM inv. no. 23 (*Pl. 16. 1*).
2. Body fragment of a pot with round impressions. RRM inv. no. 45 (*Pl. 16. 2*).

*Between -95 and -115 cm:*

1. Rim fragment of an interior decorated bowl with an incised linear pattern in the interior and on the exterior, and a small knob on the exterior. RRM inv. no. 52 (*Pl. 16. 3*).

### **Trench T1**

The foundations of two towers (T1 and T2) were uncovered by the western entrance of the basilica.

*From the northern part of the trench, at 190 cm:*

Two large, restorable storage vessels were found.

1. Amphora with cylindrical neck, round shoulder and ovoid body. The neck and the shoulder are smoothed, a wavy cordon runs around the shoulder. The surface of the vessel is rusticated underneath the cordon. There are two strap handles below the shoulder. H. 48 cm. RRM inv. no. 74.380.1 (*Fig. 67. XV.2a*).
2. Amphora (storage vessel) with flaring neck and ovoid body. The lower part of the neck is decorated with a finger impressed rib. The surface of the vessel is rusticated underneath the rib. There are two strap handles. H. 46.3 cm. RRM inv. no. 74.379.1 (*Fig. 67. XV.4*).

### **Trenches opened beyond the abbey's courtyard (Trenches K–1–25)**

#### **Trench K–3**

*Stray find from the fill of Grave 43:*

1. Rim fragment of an interior decorated bowl bearing a deeply incised, lime encrusted linear pattern in the interior. RRM inv. no. 13079 (*Pl. 16. 4*).

#### **Trench K–6**

*Between 50 and 80 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a linear pattern in the stab-and-drag style. RRM inv. no. – (*Pl. 16. 5*).

*Unstratified find (1975):*

1. Rim fragment of a pot with cylindrical neck decorated with a finger impressed vertical rib on the neck. dR. 30 cm. RRM inv. no. – (*Pl. 16. 6*).

#### **Trenches K–6 and K–16**

*Between -145 and -155 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a deeply incised linear pattern combined with a design in the stab-and-drag style. RRM inv. no. 532 (*Pl. 16. 10*).
2. Fragment of a conical bowl with everted rim. RRM inv. no. 534 (*Pl. 16. 11*).
3. Rim fragment of a small pot with a small knob on the shoulder. RRM inv. no. 531 (*Pl. 16. 12*).
4. Fragment of a conical bowl with everted rim. RRM inv. no. 530 (*Pl. 16. 13*).

#### **Trench K–6/P**

*Between 0 and -150 cm, -100 and -130 cm:*

Indistinct Somogyvár–Vinkovci finds.

*Between -65 and -100 cm:*

1. Rim fragment of a pot. RRM inv. no. 368 (*Pl. 16. 7*).

2. Rim fragment of a pot with cylindrical neck. RRM inv. no. 300 (*Pl. 16. 8*).
3. Rim fragment of an interior decorated bowl with a small knob on the exterior and a simple pattern of hatched triangles in the stab-and-drag style in the interior. RRM inv. no. 311 (*Pl. 16. 9*).
4. Folded out rim fragment of a pot. RRM inv. no. 310.

#### **Trenches K-6 and K-6/P**

##### *Unstratified finds:*

1. Fragment of a pot with cylindrical neck. The folded out rim is decorated with impressions. dR. 15.4 cm. RRM inv. no. 615 (*Pl. 17. 1*).
2. Basal fragment of a pot with rusticated surface. RRM inv. no. 10 319.

#### **Trench K-8**

##### *Between -100 and -150 cm:*

1. Fragment of a bowl with a wavy cordon. dR. 24 cm. RRM inv. no. 4133 (*Pl. 17. 2*).

#### **Trench K-9**

##### *Prehistoric pit, between -70 and -100 cm:*

1. Body fragment of storage vessel with a strap handle. The lower part of the strap handle is decorated with slender ribs; the surface of the vessel is rusticated underneath the handle. RRM inv. no. 5122 (*Pl. 17. 4*).
2. Rim fragment of an interior, exterior and rim decorated bowl with an incised linear pattern in the stab-and-drag style. RRM inv. no. 5122.
- 3-5. Body and basal fragments of pots with rusticated surface. RRM inv. no. 5122.

#### **Trench K-11/A**

##### *Between -60 and -100 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted design in the excised and stab-and-drag style. RRM inv. no. 6019 (*Pl. 17. 5, Pl. 28. 1*).

#### **Trench K-13**

##### *From the northern part of the trench, at -98 cm:*

1. Biconical spindle whorl. RRM inv. no. 6231 (*Pl. 17. 6*).

##### *From the southern part of the trench, between -135 and -198 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a linear pattern in the stab-and-drag style. RRM inv. no. 1287 (*Pl. 17. 11*).

#### **Trench K-16**

##### *Between 40 and 60 cm:*

1. Basal fragment of a mug. RRM inv. no. 4291, 4296 (*Pl. 17. 9*).
2. Fragment of a mug with curved neck. RRM inv. no. 4296 (*Pl. 17. 10*).

##### *Between -60 and -80 cm:*

1. Body fragment of a jug decorated with lime encrusted bundles of lines in the stab-and-drag style on the shoulder. RRM inv. no. 12 497 (*Pl. 17. 7*).
2. Folded out rim fragment of a pot decorated with a finger impressed vertical rib on the neck. RRM inv. no. 12 550 (*Pl. 17. 8*).
3. Rim fragment of an interior and exterior decorated bowl bearing a carelessly drawn linear pattern in the stab-and-drag style. RRM inv. no. 12 495 (*Pl. 18. 1, Pl. 29. 3*).
4. Rim fragment of an interior decorated bowl with a small knob on the exterior and a lime encrusted design in the stab-and-drag style in the interior. RRM inv. no. 12 498 (*Pl. 18. 2*).
5. Rim fragment of an interior decorated bowl. RRM inv. no. 12 492.

##### *Unstratified finds from the area between Trenches K-16 and K-19:*

1. Shoulder fragment of a small pot with three small knobs. RRM inv. no. – (*Pl. 18. 3*).
2. Body fragment of a pot decorated with round impressions. RRM inv. no. – (*Pl. 18. 4*).

#### **Trench K-17**

##### *Between 80 and 20 cm:*

1. Rim fragment of a handled mug. RRM inv. no. 5183/87 (*Pl. 18. 5*).
2. Fragment of a cordon decorated storage vessel. The surface of the vessel is smoothed above the cordon and rusticated underneath it. RRM inv. no. 5217/87 (*Pl. 18. 6*).
3. Fragment of a mug with tall neck. RRM inv. no. 5129/87 (*Pl. 18. 7*).



4. Rim fragment of a bowl with a longish, curved knob on the pronounced shoulder line. RRM inv. no. 5151/87 (*Pl. 18. 8*).
5. Rim fragment of a bowl. RRM inv. no. 5231/87.
6. Fragment of a pot with a knob on the rim. dR. 15 cm. RRM inv. no. 5130, 5162/87 (*Pl. 18. 9*).
7. Fragment of a cordon decorated storage vessel. The surface of the vessel is smoothed above the cordon and rusticated underneath it. RRM inv. no. 5177, 5160/87 (*Pl. 18. 10*).
8. Basal fragment of a pot decorated with deeply incised lines. RRM inv. no. 5201/87.
9. Basal fragment of a pot with roughly brushed surface. RRM inv. no. 5170, 5182/87 (*Pl. 18. 11*).
10. Fragment of a pot with curved neck. dR. 16 cm. RRM inv. no. 5196, 5214/87 (*Pl. 18. 12*).
- 11–13. Rim fragments of various pots. RRM inv. no. 5146, 5168, 5172/87.

#### **Trench K–19**

*From the western part of the trench, between 40 and 60 cm:*

1. Rim fragment of an interior and exterior decorated bowl bearing a linear pattern in the stab-and-drag style. RRM inv. no. 11 370 (*Pl. 19. 4*).

*From the western part of the trench, between -30 and -55 cm:*

1. Body fragment of an interior and exterior decorated bowl bearing a linear pattern in the stab-and-drag style. RRM inv. no. 11 590 (*Pl. 19. 1*).
2. Rim fragment of a bowl with low, cylindrical neck and curved, conical shoulder. RRM inv. no. 11 949 (*Pl. 19. 2*).

*From the western part of the trench, at -42 cm:*

1. Thick-walled mug with a small handle. H. 8 cm. RRM inv. no. 11 574 (*Pl. 19. 3*).

#### **Trench K–20**

*From the northern part of the trench, between -180 and -195 cm:*

1. Rim fragment of an interior and exterior decorated bowl bearing a lime encrusted design in the stab-and-drag style. RRM inv. no. 899 (*Pl. 19. 5*).
2. Body fragment of a mug. RRM inv. no. 866.
3. Body fragment of an interior decorated bowl. RRM inv. no. 868.
4. Rim fragment of a bowl with a lime encrusted zig-zag pattern in the stab-and-drag style on the shoulder. RRM inv. no. 869.

#### **Trench K–21**

*Between -135 and -150 cm:*

1. Body fragment of a pot. RRM inv. no. 2374.

*Between -140 and -205 cm:*

1. Body fragment of an interior and exterior decorated bowl bearing a lime encrusted design in the stab-and-drag style. RRM inv. no. S. 92.1.6 (*Pl. 20. 1*).
2. Body fragment of an interior decorated bowl. RRM inv. no. S. 92.1.5.

*Unstratified find from the fill of Grave 270:*

1. Rim fragment of a pot with handle. RRM inv. no. 6685.

#### **Trench K–22**

*Between 65 and 45 cm:*

1. Fragment of a pot with folded out rim and flaring neck. RRM inv. no. S. 92.2.19 (*Pl. 19. 9*).
2. Rim fragment of a bowl. RRM inv. no. S. 92.2.20 (*Pl. 19. 10*).

*Between 45 and -20 cm:*

1. Body fragment of a pot or bowl with wavy cordon decoration. The surface of the bowl is smoothed above the cordon and rusticated underneath it. RRM inv. no. S. 92.2.46 (*Pl. 19. 8*).

*Between 20 and -35 cm:*

1. Rim fragment of a pot decorated with impressions. RRM inv. no. S. 92.2.153.
2. Body fragment of a pot with rusticated surface. RRM inv. no. S. 92.2.154.
3. Fragment of a handled storage vessel. The lower part of the handle is decorated with ribs. RRM inv. no. S. 92.2.162.

*Between 20 and -10 cm:*

1. Folded out rim fragment of a pot. RRM inv. no. S. 92.2.103 (*Pl. 19. 6*).
2. Rim fragment of a bowl. RRM inv. no. S. 92.2.102 (*Pl. 19. 7*).

*From the northern part of the trench, Room 2, between 15 and 0 cm:*

1. Shoulder fragment of a bowl with conical shoulder decorated with a flat knob and fluting. RRM inv. no. S. 92.2.73 (*Pl. 20. 9*).

*From the northern part of the trench, Room 3, between 15 and 0 cm:*

1. Basal fragment of a jug with fluting on the shoulder. RRM inv. no. S. 92.2.83 (*Pl. 20. 8*).

*Pit B:*

Finds of both the Somogyvár–Vinkovci and the Transdanubian Encrusted Pottery cultures were recovered from the pit.

1. Small handled pot with smooth neck decorated with round impressions underneath the shoulder. H. 11 cm. RRM inv. no. S. 92.4.2 (*Pl. 19. 11*).
2. Fragment of a jug with folded out rim, tall, curved, conical neck and sharp carination. RRM inv. no. S. 92.4.1 (*Pl. 19. 12*).
3. Strap handle of a small pot. RRM inv. no. S. 92.2.21.
4. Rim fragment of a pot. RRM inv. no. S. 92.4.3.
5. Rim fragment of a pot decorated with finger impressions. RRM inv. no. S. 92.4.17.
6. Body fragment of a bowl with combed decoration. RRM inv. no. S. 92.4.32.

*Pit C, at -35 cm:*

1. Bowl fragment with thickened rim and conical body. RRM inv. no. S.92.3.3 (*Pl. 20. 2*).
2. Rim fragment of an interior, exterior and rim decorated bowl with a knob on the exterior and a lime encrusted design in the stab-and-drag style in the interior. RRM inv. no. S.92.3.15 (*Pl. 20. 3*).
3. Fragment of a handled jug. RRM inv. no. S.92.3.2 (*Pl. 20. 4*).
4. Rim fragment of an interior and exterior decorated bowl. RRM inv. no. S. 92.3.16.

### **Trench K–23**

*Pit under the entrance, between -70 and -100 cm:*

1. Fragment of a pot with smooth neck and rusticated body, with a small knob on the shoulder. RRM inv. no. 17392/81 (*Pl. 20. 10*).
2. Folded out rim fragment of a pot. RRM inv. no. 16874/81 (*Pl. 21. 1*).
3. Folded out rim fragment of a pot with a small knob on the shoulder. RRM inv. no. 16870/81 (*Pl. 21. 2*).
4. Rim fragment of a pot. RRM inv. no. 16865/81 (*Pl. 21. 4*).
5. Basal fragment of a large pot with slightly smoothed, rusticated surface. RRM inv. no. 17385/81 (*Pl. 21. 7*).
6. Rim fragment of an interior and exterior decorated bowl. RRM inv. no. 16865/81.
7. Shoulder fragment of a pot. RRM inv. no. 16880/81.

*Between -20 and -40 cm:*

1. Rim fragment of an interior and exterior decorated bowl decorated with a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 17815/81 (*Pl. 20. 5*).

*Between -35 and -70 cm:*

1. Rim fragment of a handled pot. dR. 18 cm. RRM inv. no. 14086/81 (*Pl. 22. 1*).
2. Rim fragment of a bowl with flaring neck. dR. 24 cm. RRM inv. no. 14141/81 (*Pl. 22. 2*).
3. Body fragment of a bowl with a knob. RRM inv. no. 14028/81.

*At -85 cm:*

1. Small handled mug with tall, curved neck, decorated with fluting on the shoulder line. H. 9 cm. RRM inv. no. 16948 (*Pl. 21. 9*).

### **Trench K–23/B**

*Between 15 and -20 cm:*

1. Fragment of a strap handle decorated with vertical fluting. RRM inv. no. 17709/81 (*Pl. 20. 6*).
2. Rim fragment of a pot. The folded out rim is decorated with round impressions, the neck with a finger impressed vertical rib. RRM inv. no. 17709/81 (*Pl. 20. 7*).
3. Rim fragment of an interior and exterior decorated bowl decorated with a flat knob on the rim, a lime encrusted linear pattern on the exterior and a lime encrusted hatched triangle-like decoration in the interior in the stab-and-drag style. RRM inv. no. 17729/81 (*Pl. 21. 3*).



### **Trench K-24**

*Between 90 and 75 cm:*

1. Body fragment of a biconical bowl. RRM inv. no. 15941/81 (*Pl. 21. 10*).

*Between 25 and 10 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 16668 (*Pl. 21. 6*).
2. Handled mug with tall, curved neck. H. 8 cm. RRM inv. no. 16377 (*Pl. 21. 8*).

*Between 10 and -15 cm:*

1. Shoulder fragment of a pot with a small knob on the shoulder. RRM inv. no. 17802/81 (*Pl. 22. 4*).
2. Fragment of a bowl with flaring neck and conical lower body decorated with a combed pattern on the lower half. RRM inv. no. 17778/81 (*Pl. 22. 5*).
3. Basal fragment of a pot with rusticated surface. RRM inv. no. 17780/81 (*Pl. 22. 6*).

### **Trench K-24/B**

*Between 90 and 70 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 16567/81 (*Pl. 21. 5*).

*Between 50 and 10 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 17981/81 (*Pl. 22. 7*).

*Between 40 and 10 cm:*

1. Short, hollow, cross shaped foot fragment of an interior decorated bowl bearing a linear pattern in the stab-and-drag style. dB. 6 cm. RRM inv. no. 17499/81 (*Pl. 22. 3*).

### **Trench P-3**

*Between 115 and 70 cm:*

1. Body fragment of an interior decorated bowl. RRM inv. no. 459/82.
1. Rim fragment of an interior decorated bowl. RRM inv. no. 469/82.

*Between 95 and 70 cm:*

1. Rim fragment of an interior decorated bowl with a carelessly drawn, lime encrusted linear pattern in the incised and stab-and-drag style. RRM inv. no. 558/82 (*Pl. 22. 8*).

### **Trench P-4**

*Between 15 and -20 cm:*

1. Fragment of a mug decorated with an incised linear pattern on the conical shoulder. RRM inv. no. 1996/82 (*Pl. 23. 1*).
2. Fragment of a jug decorated with an incised triple line on the shoulder. RRM inv. no. 2000/82 (*Pl. 23. 4*).
3. Rim fragment of a bowl decorated with a fluted zig-zag pattern on the shoulder. RRM inv. no. 1997/82 (*Pl. 23. 5*).
4. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag style. RRM inv. no. 1989/82 (*Pl. 24. 5*).

*Between 0 and -25 cm:*

1. Fragment of a handled pot with curved neck. RRM inv. no. 1678/82 (*Pl. 22. 9*).
2. Fragment of a handled pot with cylindrical neck. RRM inv. no. 1674/82 (*Pl. 22. 10*).

*Between -15 and -30 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag style. RRM inv. no. 2308/82 (*Pl. 23. 2, Pl. 28. 2*).

*Between -30 and -60 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag style. RRM inv. no. 3523/82 (*Pl. 23. 3, Pl. 28. 3*).
2. Fragment of a handled pot with curved neck. RRM inv. no. 3506/82 (*Pl. 23. 6*).
3. Shoulder fragment of a pot decorated with a small knob. RRM inv. no. 3309/82 (*Pl. 23. 9*).
4. Folded out rim fragment of a pot. RRM inv. no. 3515/82 (*Pl. 23. 10*).

### **Trench P-5**

*Between 110 and 0 cm:*

1. Small conical bowl. H. 2 cm. RRM inv. no. 772/83 (*Pl. 24. 8*).

2. Rim fragment of a biconical bowl. RRM inv. no. 784/83 (*Pl. 24. 9*).
3. Body fragment of a pot decorated with a knob on the shoulder, underneath which the vessel body is roughly brushed. RRM inv. no. 769/83 (*Pl. 24. 10*).
4. Folded out rim fragment of a pot. RRM inv. no. 769/83 (*Pl. 24. 11*).

*Between 25 and 0 cm:*

1. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag style. RRM inv. no. 4376/82 (*Pl. 24. 12*).
2. Body fragment of a pot decorated with round impressions (pinched decoration) on the smoothed surface. RRM inv. no. 4373–4374/82 (*Pl. 24. 13*).
3. Rim fragment of an interior, exterior and rim decorated bowl. RRM inv. no. 4382/82.

*Between 15 and -20 cm:*

1. Body fragment of a storage vessel with strap handle. RRM inv. no. 1983/82 (*Pl. 24. 2*).
2. Body fragment of an interior and exterior decorated bowl decorated with a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 2004/82 (*Pl. 24. 3*).
3. Fragment of a small lid decorated with a triangle pattern in the stab-and-drag style. RRM inv. no. 2008/82 (*Pl. 24. 4*).

*0 cm:*

1. Round hollow foot fragment of an interior decorated bowl. dB. 6 cm. RRM inv. no. 4434/82 (*Pl. 23. 7*).
2. Short, hollow cross shaped foot fragment of an interior decorated bowl decorated with a lime encrusted pattern in the stab-and-drag style. dB. 9 cm. RRM inv. no. 1030/83 (*Pl. 23. 8*).
3. Round hollow foot fragment of an interior decorated bowl. dB. 3.5 cm. RRM inv. no. 4435/82 (*Pl. 23. 11*).

*At -30 cm (remains of a Bronze Age fireplace):*

1. Fragment of a bowl with rounded body decorated with a small round knob on the shoulder. dR. 16 cm. RRM inv. no. 5587/82 (*Pl. 24. 1*).

*Unstratified finds from the fill of Grave 402:*

1. Fragment of a small handled pot with flaring neck. H. 10.4 cm. RRM inv. no. 7289/86 (*Pl. 24. 6*).
2. Round hollow foot fragment of an interior decorated bowl. dB. 7.5 cm. RRM inv. no. 1307/83 (*Pl. 24. 7*).
- 3–4. Body fragments of pots decorated with round impressions. RRM inv. no. 7299, 7303/86.

#### **Trench P-6**

*Between 95 and 65 cm:*

1. Decorated strap handle fragment of a bowl. RRM inv. no. 2192/82 (*Pl. 25. 4*).

*Between 40 and 0 cm:*

1. Body fragment of a handled mug decorated with a triple fluted line on the conical shoulder. RRM inv. no. 604/83 (*Pl. 25. 1*).
2. Rim fragment of an interior, exterior and rim decorated bowl decorated with a linear pattern in the stab-and-drag style and an impressed dotted line. RRM inv. no. 587/83 (*Pl. 25. 2*).
3. Fragment of an interior and exterior decorated bowl decorated with a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 587/83 (*Pl. 25. 3*).

#### **Trench P-7**

*Between -45 and -60 cm:*

1. Rim fragment of a decorated vessel with curved neck decorated with a lime encrusted zig-zag line in the stab-and-drag style under the rim. dR. 15.5 cm. RRM inv. no. 2838/82 (*Pl. 25. 5*).

*Between -110 and -130 cm:*

1. Fragment of a small handled pot. RRM inv. no. 3379/82.
2. Rim fragment of a pot. dR. 16.4 cm. RRM inv. no. 3412/82 (*Pl. 25. 6*).
3. Fragment of a conical bowl with strongly everted rim. RRM inv. no. 3413/82 (*Pl. 25. 7*).
4. Fragment of a small handled pot. dR. 12 cm. RRM inv. no. 3379/82 (*Pl. 25. 8*).

*In the western quarter, between -100 and -130 cm:*

1. Fragment of a pot with cylindrical neck decorated with a cordon on the lower part of the neck. RRM inv. no. 3663–3664/82 (*Pl. 24. 14*).



2. Rim fragment of a bowl decorated with fluted zig-zag lines around the shoulder. RRM inv. no. 3770/82 (*Pl. 24. 15*).

#### **Trench P-8**

*Between -135 and -160 cm:*

1. Folded out rim fragment of a pot decorated with a finger impressed rib on the lower part of the neck. RRM inv. no. 4617/82 (*Pl. 25. 9*).
2. Fragment of a biconical spindle whorl. Diam. 2.5 cm. RRM inv. no. 4619/82 (*Pl. 25. 10*).

#### **Trench P-17**

*Between -160 and -230 cm:*

1. Rim fragment of an interior and rim decorated bowl decorated with a small knob and a linear pattern in the stab-and-drag style on the rim. RRM inv. no. 3210/83 (*Pl. 25. 11*).
2. Body fragment of an interior decorated bowl bearing an incised pattern in the stab-and-drag styles. RRM inv. no. 3212/83 (*Pl. 25. 12*).

*Between -230 and -245 cm:*

1. Folded out rim fragment of a pot. RRM inv. no. 2678/83 (*Pl. 25. 13*).

#### **Trench P-18**

*Between -220 and -290 cm:*

- 1-3. Fragments of interior decorated bowls. RRM inv. no. 4784, 6050, 6052/84.
- 4-5. Rim fragments of bowls. RRM inv. no. 6051, 7054/84.

*Northern part of the trench, between 159 and 182 cm:*

1. Basal fragment of a larger pot. RRM inv. no. 74.368.1-3.

#### **Selection of the unstratified finds from Kornél Bakay's excavations (1972-1987)**

1. Fragment of a handled vessel with low, curved neck and rounded body. RRM inv. no. 67 (*Pl. 8. 1*).
2. Fragment of a handled jug with tall, curved neck. RRM inv. no. 73 (*Pl. 8. 2*).
3. Fragment of a jug with tall, curved neck. RRM inv. no. 89 (*Pl. 8. 4*).
4. Fragment of a biconical bowl with everted rim decorated with combed patterns underneath the carination. dR. 30 cm. RRM inv. no. 66 (*Pl. 8. 5*).
5. Rim fragment of a pot with curved, cylindrical neck. dR. 19 cm. RRM inv. no. 86 (*Pl. 8. 7*).
6. Fragment of a handled pot. dR. 14 cm. RRM inv. no. - (*Pl. 8. 8*).
7. Fragment of a handled pot with folded out rim and curved neck. dR. 12 cm. RRM inv. no. 4151 (*Pl. 8. 9*).
8. Folded out rim fragment of a pot. RRM inv. no. - (*Pl. 8. 10*).
9. Shoulder fragment of a pot with a finger impressed rib decoration. RRM inv. no. 86 (*Pl. 8. 11*).
10. Fragment of a jug with tall, curved neck. RRM inv. no. 97 (*Pl. 9. 1*).
11. Fragment of a flask. RRM inv. no. 9620 (*Pl. 9. 2*).
12. Rim fragment of a pot decorated with an incised linear pattern and an impressed knob under the rim. RRM inv. no. 88 (*Pl. 9. 3*).
13. Fragment of a handled jug decorated with oblique and vertical fluting on the shoulder. RRM inv. no. 770/83 (*Pl. 9. 4*).
14. Shoulder fragment of a bowl decorated with a small knob on the shoulder and a combed pattern on the conical body. RRM inv. no. 16741/81 (*Pl. 9. 5*).
15. Fragment of a handled bowl with biconical body. RRM inv. no. 23732, 23744 (*Pl. 9. 6*).
16. Fragment of a small handled pot. RRM inv. no. 5424 (*Pl. 9. 7*).
17. Fragment of a small handled pot. RRM inv. no. 989 (*Pl. 9. 8*).
18. Folded out rim fragment of a pot. RRM inv. no. 1998/83 (*Pl. 9. 9*).
19. Fragment of an interior and exterior decorated bowl bearing a carelessly drawn, lime encrusted incised pattern in the stab-and-drag style. RRM inv. no. 125 (*Pl. 26. 1*).
20. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted incised pattern in the stab-and-drag style. RRM inv. no. 1579 (*Pl. 26. 2*).
21. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted incised pattern in the stab-and-drag style. RRM inv. no. - (*Pl. 26. 3*).
22. Rim fragment of an interior and exterior decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag style (RRM inv. no. - (*Pl. 26. 4*).

23. Low, hollow, cross shaped foot fragment of an interior decorated bowl bearing a lime encrusted pattern in the excised and stab-and-drag styles. dB. 5.5 cm. RRM inv. no. – (*Pl. 26. 5*).
24. Low, hollow cross shaped foot fragment of an interior decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. dB. 5.5 cm. RRM inv. no. – (*Pl. 26. 6*).
25. Low, hollow cross shaped foot fragment of an interior decorated bowl. dB. 5.5 cm. RRM inv. no. 81.13.25.2 (2301/76) (*Pl. 26. 7*).
26. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 502/81 (*Pl. 26. 9*).
27. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 9831 (*Pl. 26. 10*).
28. Body fragment of a decorated vessel bearing a lime encrusted pattern of hatched triangles on the exterior in the stab-and-drag style. The interior is rusticated. RRM inv. no. 23195 (*Pl. 28. 4*).
29. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 9831 (*Pl. 29. 1*).
30. Rim fragment of an interior, exterior and rim decorated bowl bearing a lime encrusted pattern in the stab-and-drag style. RRM inv. no. 1046 (*Pl. 29. 5*).

**Stray finds from the land of István Sándor**

- 1–2. Basal fragments of jugs with conical shoulder and conical lower bodies. RRM inv. no. 3994/82, 3995/82 (*Pl. 8. 3, 13*).
3. Fragment of a pot decorated with a knob on the rim. RRM inv. no. 3991/82 (*Pl. 8. 6*).
4. Fragment of a pot decorated with a flat knob on the rim. RRM inv. no. 3992–3993/82 (*Pl. 8. 12*).

**199. Somogyviszló–Bodonya (County Baranya)**

Settlement.

Field survey.

Vessel body fragments from the Early Bronze Age. JPM inv. no. Ö.69.31.3–4. Unpublished.  
*Bándi* (1979) 71; *Bondár* (1995) 254.

**\*200. Somogyzsitfa–Eastern boundary of Földvár (County Somogy)**

Settlement.

Field survey (Géza Széchenyi, 1974).

1. Rim fragment of an interior, exterior and rim decorated bowl (*Pl. 30. 8*).
2. Conical bowl fragment with a small lug handle on the shoulder.
3. Fragment of a round spindle whorl (*Pl. 30. 9*).

RRM Archaeological Archives no. 74/30.

**\*201. Somogyzsitfa–Szőcsénypuszta (County Somogy)**

Stray find.

1. Rim fragment of an interior, exterior and rim decorated bowl (*Pl. 30. 10*).
2. Thickened rim fragment of a bowl.

RRM inv. no. –.

**\*202. Söjtör–Rapát (County Zala)**

Settlement.

Field survey (András László Horváth, Katalin H. Simon, 1990).

Rim fragment of an interior decorated bowl.

*Horváth* (2001) 56, Abb. 2. 3.

**203. Söjtör–Telekalja (County Zala)**

Settlement.

Field survey (András László Horváth, Katalin H. Simon, 1990).

Body fragment of a vessel with Vučedol-type decoration.

*Horváth* (2001) 56, Abb. 2. 2.

**\*204. Szakály (County Tolna)**

Settlement.

Field survey (István Torma, 1963).

1. Body fragment of an interior decorated bowl. WMM inv. no. 74.421.9.
  2. Rim fragments of several pots with folded out rim. WMM inv. no. 74.421.10.
- Torma* (1964) Site 250.



- \*205. Szakály–Kistavapuszta** (County Tolna)  
Settlement.  
Field survey (István Torma, 1963).  
Small body fragment of an interior decorated bowl. WMM inv. no. 74.423.1.  
*Torma* (1964) Site 306.
- 206. Szakály–Ürgevár** (County Tolna)  
Settlement.  
Field survey (István Torma, 1962).  
Body fragments of larger pots with brushed or rusticated decoration, folded out rim fragments, body fragments with strap handles. WMM inv. no. 74.405.4–16.  
*Torma* (1964) Site 124.
- \*207. Szava** (County Baranya)  
Settlement.  
Excavation (600 m<sup>2</sup>, István Ecsedy, 1975–1976).  
19 pits, some of them with traces of fire. The complete area of the settlement is between 10,000 and 15,000 m<sup>2</sup>.  
Seven pits (Pits 1, 2, 6, 8, 16, 19, 20) of the 19 excavated pits contained interior decorated bowl fragments. Fragments with interior, exterior and foot decoration. Their decoration is simple, made up of patterns in the incised and stab-and-drag style and hatched triangles: *Ecsedy* (1978b) 185, Pl. I. 5–6; *idem* (1979a) Taf. II. 12–13, Taf. VI. 9, Taf. VII. 8, Taf. VIII. 4, Taf. IX. 10–13, Taf. XV.  
*Ecsedy* (1978b); *idem* (1979a); *Bondár* (1995) 254.
- 208. Szederkény** (County Baranya)  
Stray finds.  
Various vessel fragments. JPM inv. no. Ö.62.154.1–2. Unpublished.  
*Bándi* (1979) 71; *Bondár* (1995) 254.
- 209. Szegerdő–Legelői-dűlő** (County Somogy)  
Settlement.  
Field survey.  
Vessel fragments from the Early Bronze Age.  
*Bondár* (1996b) 54, Site 192.
- 210. Szegerdő–Beside the Mosóvölgyi channel** (County Somogy)  
Settlement.  
Field survey (1993).  
Pot body fragments.  
RRM Archaeological Archives.
- 211. Szemely–Poljanak-Törökdomb** (County Baranya)  
Stray find.  
Trapeze shaped flat axe. JPM inv. no. Ö.72.11.2–8. Unpublished.  
*Bándi* (1979) 71; *Bondár* (1995) 254.
- 212. Szentlőrinc–Melegoldal** (County Baranya)  
Stray find.  
Biconical handled jug. H. 14 cm. JPM inv. no. 12/1942. Unpublished.  
*Bóna* (1965a) 43; *Bándi* (1979) 72; *Ecsedy* (1979a) 104, Fo. 29; *Bondár* (1995) 254.
- 213. Szentlőrinc–Újhegy** (County Baranya)  
Settlement.  
Stray finds. JPM inv. no. Ö.69.57.1–3. Unpublished.  
*Bándi* (1979) 71–72; *Bondár* (1995) 254.
- 214. Szepetnek–Kispityer** (County Zala)  
Settlement.  
Field survey (László Horváth, 1988).  
Vessel fragments from the Early Bronze Age. TGyM inv. no. 89.49.44–46. Unpublished.  
*Horváth* (1994) 97; *Bondár* (1995) 254.
- 215. Szepetnek–Középtábla-dűlő** (County Zala)  
Settlement.  
Field survey (László Horváth, 1988).

- Vessel fragments from the Early Bronze Age. TGYM inv. no. 89.49.43.14. Unpublished.  
*Horváth* (1994) 97; *Bondár* (1995) 254.
- \*216. Szombathely–Körmendi Road** (County Vas)  
 Stray find.  
 Fragment of an interior decorated bowl with round foot with a cross shaped hollow interior. H. 7 cm, dB. 6 cm.  
*Patay* (1940) 4 (with the find spot specified as Körmend); *Mozsolics* (1945) 45, Abb. 2; *Kalicz* (1968) 80, Fo. 53; *Ilon* (2004) 46, Pl. II. 2.  
**a: Szombathely–Jáki úti kavicsbánya** [gravel pit on Jáki Road] (County Vas)  
 Settlement.  
 Small-scale rescue excavations (Terézia Buócz, 1961; Tihamér Szentlélek, 1965).  
 The site is located in the extensive gravel-pit between Jáki Road and Körmendi Road, on the western side of the Perint Stream.  
 One pit (Diam. 2 m) and further traces of pits were identified. Three intact stray vessels were found (1961).  
 There is no excavation report for the 1965 season.  
*Károlyi* (1971–72) 167–172, Figs 1–3, Pl. I, Pl. II. 8, 11–18, Pl. III. 1–7.
- \*217. Szökedencs–Cölömpös-árok (M7 Motorway, Site S–55)** (County Somogy)  
 Settlement and burials.  
 Salvage excavation (12,300 m<sup>2</sup>, Szilvia Honti, Gergely Péter Németh, 2005).  
 A few pits and 53 cremation burials.  
*Honti* (2007a) 26; *Honti–Németh* (2007a).
- 218. Szőlősgyőrök–Gombosalja I** (County Somogy)  
 Settlement.  
 Field survey (1988–1989).  
 RRM Archaeological Archives.
- 219. Szőlősgyőrök–Homokbánya** [sand-pit] (County Somogy)  
 Settlement.  
 Small-scale rescue excavation (Szilvia Honti, László Költő, 1993).  
 Unstratified finds: two body fragments with brushed decoration and a basal fragment with rough brushed decoration.  
 RRM Archaeological Archives.
- 220. Szőlőskislak–Tömöri rét** (County Somogy)  
 Settlement.  
 Small-scale rescue excavation (Szilvia Honti, 1994).  
 Unstratified Somogyvár–Vinkovci pot fragments were found.  
 RRM Archaeological Archives.
- 221. Szulimán–Temető** [cemetery] (County Baranya)  
 Stray finds.  
 Vessel fragments from the Early Bronze Age. JPM inv. no. Ö.72.13.3–7. Unpublished.  
*Bándi* (1979) 72; *Bondár* (1995) 254.
- 222. Tamási** (County Tolna)  
 Stray find.  
 Small, handled biconical mug with cylindrical neck (*Pl. 52. 2*).  
 WMM inv. no. 84.192.1.
- 223. Tamási–Adorján Újtelep** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1962).  
 Body fragment with brushed decoration. WMM inv. no. 74.451.12.  
*Torma* (1964) Site 225.
- 224. Tamási–Szemcse** (County Tolna)  
 Settlement.  
 Field survey (István Torma, 1962).  
 1. Rim fragment of a handled pot. WMM inv. no. 74.435.10.  
 2. Body fragment with brushed decoration. WMM inv. no. 74.435.11.  
*Torma* (1964) Site 64.



**\*225. Tamási–Szőlőhegy (bottom of the slope) (County Tolna)**

Settlement.

Excavation (József Csalog, 1941).

A rectangular pit (measuring 217 cm x 260 cm on top and 140 cm x 150 cm at the bottom, D. 20 cm), some post-holes and unstratified finds were uncovered. Only the fragment of a marinating vessel with interior knob decoration was quoted from among the finds.

An interior, exterior and rim decorated bowl fragment is known from description of the stray finds. It is decorated with a hatched triangle pattern on the exterior, a star motif in the interior and a dotted line around the rim. H. 6.9 cm. WMM inv. no. the find was lost (*Csalog* [1944–45] 195).

*Csalog* (1944–45) 195; *Kalicz* (1968) 80, Site 68 (Makó group of the Zók culture).

**226. Taszár (County Somogy)**

Stray finds.

Field survey.

Pot rim fragment with finger impressed decoration.

RRM Archaeological Archives no. 74/276.

**227. Tihany–Láp (County Veszprém)**

Settlement.

Small mug with handle. H. 9.2 cm.

MRT 2, Site 45/16, Pl. 6. 5.

**228. Tikos–Homokgörök (M7 Motorway, Site S–44) (County Somogy)**

Settlement.

Salvage excavation (46,000 m<sup>2</sup>, Gábor Serlegi, 2003–2004).

Several pits.

*Serlegi* (2007a).

**229. Tolna–Mözs (M9 Motorway, Site 10/B) (County Tolna)**

Settlement.

Salvage excavation (Attila Gaál, Márta G. Vizi, János Gábor Ódor, 1996–1997).

Several pits and other features of the Somogyvár–Vinkovci, Somogyvár–proto-Nagyrev and early Nagyrev cultures. Unpublished.

*Kiss–Kulcsár* (2001); *Ódor* (2007) 19.

**230. Tolna–Mözs (M9 Motorway, Site 32) (County Tolna)**

Settlement.

Salvage excavation (Attila Gaál, Márta G. Vizi, János Gábor Ódor, 2000s).

Several pits and other features of the Somogyvár–Vinkovci, Somogyvár–proto-Nagyrev and early Nagyrev cultures. Unpublished.

*Ódor* (2007) 19.

**\*231. County Tolna (County Tolna)**

Unprovenanced finds.

Vučedol culture:

1. Body fragment of a jug decorated with concentric circles and a zig-zag line. WMM inv. no. 59.288.1 (*Pl. 52. 1*).

Somogyvár–Vinkovci culture:

1. Biconical mug with cylindrical neck. WMM inv. no. 61.8.1 (*Pl. 52. 3*).

2. Fragment of a bowl decorated with a lattice pattern of combed bundles of lines on the lower part under the shoulder. WMM inv. no. 59.314.1 (*Pl. 52. 6*).

3. Round, hollow foot fragment of an interior decorated bowl. WMM inv. no. – (*Pl. 52. 4*).

4. Round, hollow foot fragment of an interior decorated bowl. WMM inv. no. 59.282.1.

**232. Tolnanémedi–Nebojsza (County Tolna)**

Settlement.

Field survey (Zsuzsa Miklós, in 1990s).

Zsuzsa Miklós collected a thickened rim fragment of a bowl on the settlement located on the right bank of the River Kapos.

*Miklós* (2007) 146, Fig. 133. 1–2.

**\*233. Toponár–Régi temetődomb** (County Somogy)

Settlement.

Field survey (1980).

1. Fragment of an interior, exterior and rim decorated bowl (*Pl. 30. 5*).

2. Fragment of an interior, exterior and rim decorated bowl (*Pl. 30. 6*).

RRM Archaeological Archives.

**234. Vajta–Kisvajta puszta** (County Fejér)

Burial (?) and stray finds.

Cremation burial (?) with four mugs as grave goods: *Makkay* (1970) 40(42), Fig. 30.

Other stray finds: four mugs/jugs (Somogyvár–Vinkovci/early Nagyrév culture): *Bándi* (1982) 176, Abb. 11.

*Patay* (1938) 21; *Kalicz* (1968) 80, Fo. 59; *Makkay* (1970) 40(42), Fig. 30; *Ecsedy* (1979a) 108; *Bándi* (1982) 176, Abb. 11.

**235. Veszprém–Nyúlkertek** (County Veszprém)

Settlement.

Field survey (1965).

Body fragment with an incised herringbone pattern, perhaps a find of the Somogyvár–Vinkovci culture.

MRT 2, 248, Site 51/60.

**236. Villány–Virágos** (County Baranya)

Settlement.

Vessel fragment from the Early Bronze Age. JPM inv. no. Ő.69.42.1.

*Bándi* (1979) 72; *Bondár* (1995) 254.

**237. Vörs–Battyáni disznólegelő** (County Somogy)

Settlement.

Excavations (Szilvia Honti, Péter Gergely Németh, in 1983–1991 (2500 m<sup>2</sup>), in 2000 (1000 m<sup>2</sup>)).

About 20 pits and small rectangular features with plastered floor (*ca.* 2 m x 2 m).

Only the finds of Pit 85 and an unstratified flask have been published.

*Bondár* (1989) 36, Fo. 19; *Bondár* (1995) 254; *idem* (1996b) 54, Site 138, Figs 13–15; *Honti–Németh* (2001); *idem* (2003).

**238. Vörs–Borzás-South** (County Somogy)

Settlement.

Excavation (László Költő, 1985).

Unstratified pottery fragments of the Somogyvár–Vinkovci culture.

*Bondár* (1995) 254; *idem* (1996b) 54, Site 149.

**239. Vörs–Máriaasszony sziget** (County Somogy)

Settlement.

Excavation (1988).

Pit (Pit 22).

RRM Archaeological Archives.

**240. Vörs–Nyíres-sziget** (County Somogy)

Settlement.

Small-scale rescue excavation (Katalin Ottományi, 1985).

One pit and various unstratified finds: a few pot and bowl fragments and the fragment of a spindle whorl.

*Bondár* (1995) 254; *idem* (1996b) 54, Site 152.

**241. Vörs–Papkert “A”** (County Somogy)

Stray finds.

Excavation.

Unstratified finds from the excavation trenches: a small jug and other pottery fragments. Unpublished.

*Bondár* (1996b) 54, Site 142.

**242. Zalakoppány–Aszaltető** (County Zala)

Settlement.

Field survey (Jolán Horváth, 1967).

Pot rim fragments. Göcseji Museum, Zalaegerszeg. Unpublished.

HAS AI Archives, photo no. 52.781.



- 243. Zalaszentmihály–Déli tőzegmező** (County Zala)  
 Settlement.  
 Field survey (Károly Sági, 1959).  
 Bowl, pot rim and body fragments. Balaton Museum. Unpublished.  
 HAS AI Archives, photo no. 58.942.
- 244. Zaláta–Heténye-dűlő** (County Baranya)  
 Settlement.  
 Stray find.  
*Bándi* (1979) 72; *Bondár* (1995) 254.
- 245. Zamárdi** (County Somogy)  
 Stray finds.  
 1. Pot with flaring neck decorated with divided knobs on the shoulder and combed bundles of lines on the body.  
 2. Bowl fragment with elongated knobs. Unpublished.  
 RRM inv. no. –.
- 246. Zamárdi** (County Somogy)  
 Stray find.  
 Piller Dezső Collection.  
 Jug body fragment with Vučedol-like decoration in the stab-and-drag style.  
 RRM inv. no. –.
- 247. Zamárdi–Bazsi-tanya** (County Somogy)  
 Settlement.  
 Excavation.  
 Unstratified fragment of a handled mug. Unpublished.  
 RRM inv. no. –.
- \*248. Zamárdi–8 Csap Street** (County Somogy)  
 Settlement.  
 Small-scale rescue excavation (Dezső Piller, 1962).  
 Refused pit.  
 Interior decorated bowl with rectangular, hollow foot bearing a design of a triangle filled with a chequerboard pattern and a cross motif enclosed within a circle in its interior. H. 7.5 cm, dR. 19–19.5 cm, dB. 6 cm x 5.5–6.5 cm. RRM inv. no. 74.239.22 (*Fig. 61. 1*).  
*Kulcsár* (1999a) 115, Pl. I. 42, Pl. 6.
- 249. Zamárdi–46 Fő Street** (County Somogy)  
 Scattered cremation burial (?).  
 Small-scale rescue excavation (Edith Bárdos, 2005).  
 Partially excavated feature (190 cm x 150 cm) with red, burnt floor yielding a large number of pottery fragments, animal bones and human ashes. Edith Bárdos interpreted the feature as a burial.  
*Bárdos* (2006).
- 250. Zamárdi–Kútölgyi-dűlő (M7 Motorway, Site S–1)** (County Somogy)  
 Settlement.  
 Field surveys (1993) and salvage excavations (32,300 m<sup>2</sup>, Viktória Kiss, Péter Polgár, 2002–2003; Ádám Dávid Hajdú, 2005).  
 Several features: pits, beehive shaped pits, pit complexes, fireplaces, ovens. One beehive shaped pit contained an intact cattle skeleton and the skeletal remains of various other animals.  
*Kiss* (2004b); *Polgár* (2004a); *Hajdú* (2007); *Kiss* (2007b).
- 251. Zamárdi–Papdűlő** (County Somogy)  
 Stray find.  
 Collected by Horváth–Stohl, 1977.  
 Body fragment of a pot with polished neck and brushed decoration.  
 RRM Archaeological Archives no. 78/67.
- \*252. Zamárdi–Szamárkő-Ácstanya** (County Somogy)  
 Stray finds.  
 a. Fragment of an interior decorated bowl and large handles.  
 RRM Archaeological Archives no. 78/54.

b. Probably the same site under the name Szántód. Fragment of a Somogyvár–Vinkovci mug with tall, narrow neck collected by Horváth in 1977.

RRM Archaeological Archives no. 78/51.

**253. Zamárdi–Bypass 65101, Sites 56, 58/b, 89 (County Somogy)**

Settlement(s).

Salvage excavation (27 195 m<sup>2</sup>, Zsolt Gallina, 2005).

A few pits.

*Gallina* (2006).

**\*254. Zók–Várhegy (County Baranya)**

Settlement.

a. Excavations (D. D. Karapandzić, 1917 and 1919; Gyula Török, 1935 and 1940).

Unstratified finds of the Baden, Vučedol–Zók and Somogyvár–Vinkovci cultures.

Vučedol–Zók culture: *Tömpe* (1937) 61, Taf. 20; *Schmidt* (1945) Tab. 84. Unstratified fragments of interior decorated bowls (*Vulić–Grbić* [1938] Pl. 18. 1–9; *Patay* [1940] 5, Pl. I. 5; *Török* [1942] 10–19).

Somogyvár–Vinkovci culture: 1. a plain biconical handled jug, 2–3. a handled jug and mug decorated with incised zig-zag lines, 4–5. fragments of two, identically decorated flasks, 6. an undecorated flask (*Vulić–Grbić* [1938] Pl. 18. 1–8; *Banner* [1941a] 18, Pl. 3. 61–64; *idem* [1941b] 350–352, Pl. 1. 8–9, Pl. 3. 39–40; *Bóna* [1965a] 44, Pl. XVI. 5–9, 11).

b. Excavation (István Ecsedy, 1977–1980, 1982).

Vučedol and late Vučedol culture: Fortified settlement, several pits and buildings, metal workshop.

Unstratified fragments of interior decorated bowls (*Ecsedy* [1983a] Pls II–III).

Somogyvár–Vinkovci culture: Unstratified finds from the central area and from the Vučedol defensive ditch. Only Somogyvár–Vinkovci finds were recovered from the two pits interpreted as pit-dwellings, a rectangular ritual pit and three other pits uncovered on the southern part of the plateau south of the Vučedol ditch.

Interior and exterior decorated bowl with round hollow foot. H. 11.3 cm. (Pit 1977/C/2: *Ecsedy* [1983a] Fig. 25).

*Ecsedy* (1983a) 71, Figs 25–27, Pl. VIII. 2–4; *Bondár* (1995) 254; *Ecsedy* (1999).

## **Austria (Burgenland)**

**255. Illmitz (Illmic)**

Burial (?)

Grave goods described by Richard Pittioni: an amphora with cylindrical neck and two bowls.

*Barb* (1934–37); *Pittioni* (1941) Taf. 1; *idem* (1954) 184, Abb. 122. 1–3; *Bóna* (1965a) 41; *Hahnel* (1992) 86–87, note 34.

**256. Neusiedl am See–Kalvarienberg (Nezsider–Kálvária)**

Tumulus burial.

Small excavation and field survey (Lieutenant Deeg, Adalbert Riedl, 1943).

Grave 1: W–E oriented inhumation burial of an adult male under the tumulus (Diam. 18 m, H. 2 m) (2760–2660 BC). Grave goods: two golden lockrings, two jugs and an amphora.

Grave 2: Above the male body lay a later child burial (1690–1610 BC, 1640–1520 BC; late Wieselburg/Gáta culture)).

*Pittioni* (1947b); *idem* (1954) Abb. 120–121 (earlier described as a female burial); *Bóna* (1965a) 41, Pl. XIII. 5–7, Pl. XVII. 14–15 (earlier as a women burial); *Kaus* (1987); *Hahnel* (1992) 86–87, note 33; Taf. 6. 4; *Ruttkay* (2002); *Stadler* (2002); *Ruttkay* (2003).

## **Croatia**

**257. Drljanovac (also named as Koprivniča)**

Inurned burial.

Ashes were found in a larger vessel covered by a bowl. Only the lower part of the urn survived.

*Majnarić–Pandžić* (1981); *Bondár* (1995) 251.



**258. Drljanovac–Ograda I**

Settlement.

Excavation (Aleksander Durman, 1981).

“Sonda II”: a pit and a rectangular, timber-framed small house (3.20 m x 3.50 m). The finds indicate an occupation during the early Vinkovci period.

*Durman* (1982) 38, 42, Tab. 1. 2, Tab. 7–8; *Marković* (1993) 121.

**259. Đakovo–Grabovac**

Settlement.

Excavation (Aleksander Durman, 1997).

A few features: early Vinkovci culture and late Vučedol imports.

*Marković* (2002) Pls 4–5.

**260. Ilok (Újlak)–Tvrđava**

Settlement.

Only a selection of the finds has been published.

*Tasić* (1984) Taf. I, Taf. II. 5, 8–11, 13; *Bondár* (1995) 252.

**261. Koprivnička (Kapronca)–Rijeka–Rudina**

Settlement.

Excavations (Zorko Marković, 1978–1979).

One house, 19 pits and 10 fireplaces were found. Many animal bones were recovered from Pits 4 and 19.

Rudina I period: late Vučedol culture/Vučedol III with Somogyvár–Vinkovci finds.

*Marković* (1981); *Tasić* (1984) Taf. II. 1–2; *Marković* (1985) 31–45; *Bondár* (1995) 252; *Tasić* (1995a) 156, Fig. 37; *Marković* (2002).

**262. Lovas–Kálvária**

Settlement.

Unpublished finds.

*Dimitrijević* (1982a) 32; *Bondár* (1995) 252.

**263. Martinac**

Stray finds.

Four vessel fragments.

The finds were assigned to the Syrmian–Slavonian Vučedol C period (*Dimitrijević* [1961] 60, Tab. XIX. 156–157) and probably early Vinkovci culture (*ibidem* 60, Tab. XIX. 154–155).

*Dimitrijević* (1961) 60, Tab. XIX. 154–157; *idem* (1977–78) 38, 39, Abb. 7. 5; *Ecsedy* (1979a) 104; *Bondár* (1995) 252.

**\*264. Opatovac–former Königsdorfer wineyard (“ex Weinberg Königsdorfer”)**

Settlement (?), stray finds (1911).

Two-handled mugs and an interior decorated late Vučedol bowl.

The three stray vessels were first published by Stojan Dimitrijević as finds of the Vučedol culture (*Dimitrijević* [1956a] 7–8, T. III. 20–22); later, he classified them as finds belonging to the Syrmian–Slavonian Vučedol C period (*Dimitrijević* [1977–78] 38, 40, Taf. 17. 3); even later, following the excavations at Vinkovci, he assigned the vessels to the Vinkovci culture (*Dimitrijević* [1982a] 32). Hungarian research too classifies them as representing the Somogyvár–Vinkovci culture (*Ecsedy* [1979a] 104; *Bondár* [1995] 253).

Fragment of the upper part of an exterior decorated bowl, interior decoration is not known. H. 5.8 cm, dR. 14.1–14.5 cm (*Dimitrijević* [1956a] 7–8, T. III. 20; *idem* [1977–78] 38, 40, Taf. 17. 3).

*Dimitrijević* (1956a) 7–8, Taf. III. 20–22; *idem* (1977–78) 38, 40, Taf. 17. 3; *Ecsedy* (1979a) 104; *Dimitrijević* (1982a) 32; *Bondár* (1995) 253.

**265. Orešac (Homokdiód)**

Stray find.

*Marković* (1989) Pl. 2; *Bondár* (1995) 253.

**266. Orolik–Gradina**

Burials (?).

Details not specified.

*Majnarić–Pandžić* (1974); *Dimitrijević* (1982a) 32; *Bondár* (1995) 253.

**267. Privlaka—next to the Gradina**

Settlement (?).

Excavation (Marija Šmalcej, 1973, 1976).

Details not specified.

*Dimitrijević* (1982a) 32; *Bondár* (1995) 254.

**268. Sarvaš—Gradac**

Stratified settlement.

Excavations (Robert Rudolf Schmidt, 1942–1943; Jasna Šimić, 1985–1986).

Finds of the Sopot/Kostolac/Vučedol/Vinkovci/Belegiš cultures were recovered from the layers of the settlement.

*Dimitrijević* (1982a) 32; *Marković* (1993) 121, Sl. 5. 5; *Šimić* (1993); *Bondár* (1995) 253; *Balen* (2006).

**269. Selci—Đakovački—Kaznica**

Inurned burial.

Salvage excavation (Ivo Pavlović, Tomislav Hršak, 2005–2006).

Inurned burial with four grave goods: an urn, a pot, the fragment of a decorated bowl and the fragment of a bowl.

*Kalafatić—Hršak* (2007).

**\*270. Sotin—Unknown site**

Stray find (1904).

Bowl with exterior and rim decoration and a closed, hollow foot with a rattle. H. 9.4–9.7 cm, dR. 14.1 cm. Late Vučedol/Early Vinkovci culture.

In 1929, the footed bowl was published by Gordon Childe as a vessel from the Vučedol site (*Childe* [1929] Fig. 114). Josip Korošec regarded the find spot as a site of the Slavonian culture (*Korošec* [1950] 133). Stojan Dimitrijević described it as a Vučedol find from Sotin (*Dimitrijević* [1956a] 8–9, Tab. V. 30). Later, the bowl was quoted as a vessel of the Syrmian–Slavonian Vučedol C period (*Dimitrijević* [1982a] 38–39, Taf. 17. 2). The find spot is sometimes specified as Sakač–Szölőhegy (see below) and assigned to the Syrmian–eastern Slavonian sites of the Vinkovci culture (*ibidem* 32). From the late 1970s, the site was regarded as lying in the Somogyvár–Vinkovci distribution by Hungarian research (*Ecsedy* [1979a] 104; *Bondár* [1995] 254).

*Childe* (1929) Fig. 114; *Korošec* (1950) 133; *Dimitrijević* (1956a) 8–9, Tab. V. 30; *Dimitrijević* (1977–78) 38–39, Taf. 17. 2; *Ecsedy* (1979a) 104; *Dimitrijević* (1982a) 32; *Bondár* (1995) 254.

**271. Sotin—“Sakačevu vinogradu”**

Settlement (?), stray find (1901).

One-handed jug. H. 14.2 cm, dR. 8 cm. Late Vučedol/Early Vinkovci culture.

Stojan Dimitrijević initially described it as Vučedol site (*Dimitrijević* [1956a] 9, Tab. V. 31), but later assigned it to the Vinkovci culture (*Dimitrijević* [1982a] 32), a cultural attribution accepted by later research (*Ecsedy* [1979a] 104; *Bondár* [1995] 254).

*Dimitrijević* (1956a) 8–9, Tab. V. 31; *Ecsedy* (1979a) 104; *Dimitrijević* (1982a) 32; *Bondár* (1995) 254.

**272. Stari Jankovci (Ójankovác)**

Stray finds and settlement.

Stray finds (1880, 1906).

Two handled jugs (H. 13.9 cm and 16.2 cm) came to light as stray finds. The jugs were variously interpreted as finds of the Vučedol culture (*Schmidt* [1945] 145; *Dimitrijević* [1956a] 2, 9, Taf. V. 32–33), the Slavonian culture (*Korošec* [1950] 133), and the Vinkovci group (*Dimitrijević* [1982a] 32, 40, note 83; *Bondár* [1995] 254).

Stray finds (1880): silver shaft–hole axes (*Balen—Mihelić* [2003]).

*Schmidt* (1945) 145; *Korošec* (1950) 133; *Dimitrijević* (1956a) 2, 9, Taf. V. 32–33; *Dimitrijević* (1982a) 32, 40, note 83; *Bondár* (1995) 254; *Ložnjak* (2001).

**273. Stari Mikanovci—Gradina**

Settlement.

Rescue excavation (1980). Unpublished.

*Dimitrijević* (1982a) 32; *Bondár* (1995) 254.

**274. Vinkovci—40 Duga ulica**

Inurned burial.

Small-scale rescue excavation (400 m<sup>2</sup>, 1999).



The urn was covered with a deep bowl. The urn contained the bones of an adult male (45–60 years old). *Kalafatić* (2006).

**275. Vinkovci–Tržnica and Hotel (“Starija Pijaca”, “Market and Hotel”, “ex–Marktplatz”)**

Settlement and unstratified finds.

Excavations (30,25 m<sup>2</sup>, Stojan Dimitrijević, 1962; 2170 m<sup>2</sup>, Stojan Dimitrijević, Aleksandar Durman, 1977–1978).

Stratified settlement. Overlying the Neolithic layer was a layer of the Vučedol B2 period (Horizon B), followed by four layers of the Vinkovci culture: Vinkovci A1–A2 culture (Horizon C1–C2) and Vinkovci B1–B2 cultures (Horizon D1–D2). There was no indication of occupation during the Vučedol C period (*Dimitrijević* [1982a] 8).

Clay moulds suggesting metalworking from the Vučedol B2 period (*Dimitrijević* [1982a] 13, T. 1. 3–5; *Durman* [1983]; *idem* [1984]; *idem* [1988]).

*Brunšmid* (1902) Sl. 50. 3; *Dimitrijević* (1956a) 12, T. VIII. 49–52, T. IX. 53; *idem* (1956b); *idem* (1966); *idem* (1971); *Ecsedy* (1979a) 104; *Dimitrijević* (1982a); *Durman* (1983); *idem* (1984); *Tasić* (1984), Pl. IV; *Durman* (1988); *Bondár* (1995) 254; *Tasić* (1995a) 166–167, Fig. 46. *Dizdar et al.* (1999).

**276. Vinkovci–Unknown site**

Stray finds.

Various Vučedol and Vinkovci finds, mostly flasks.

*Dimitrijević* (1979) 140, 207–208, Tab. 5. 4, 7–9, Karta 2.

**277. Viškovci**

Settlement.

*Marković* (1989) Sl. 2; *idem* (1993) 121; *Bondár* (1995) 254.

**278. Vučedol–Gradac, Kukuružište Streim and Vinograd Streim**

Stratified settlement (Baden, Kostolac, Vučedol cultures).

Excavations (Robert Rudolf Schmidt, 1938; Stojan Dimitrijević, 1966–67; Alexander Durman, 1981, 1984–1990).

Two pits and stray finds.

*Schmidt* (1945) Pl. 53. 4; *Dimitrijević* (1982a) 32; *Težak-Gregl* (1986); *Durman* (1988); *Bondár* (1995) 254.

**279. Vukovar (Vukovár)**

Settlement.

Unpublished.

*Dimitrijević* (1982a) 32; *Bondár* (1995) 254.

## Serbia

**280. Batrovci–Gradina (Gradina na Bosutu)**

Settlement.

Excavations (Nikola Tasić, P. Milosević, 1964–1965; Predrag Medović, D. Popović, Tasić, 1975–1985).

Stratified settlement; Bosut IIIa–b: Bronze Age. A pit (Pit A) and other unstratified finds were quoted from the Early Bronze Age layer.

*Tasić* (1965) 48; *idem* (1968) 20–22, Abb. 1–8; Abb. 14. 7–12; *Ecsedy* (1979a) 104; *Girić* (1981); *Dimitrijević* (1982a) 32; *Tasić* (1983) Sl. 6, 8–9, Tab. V. 5–6;<sup>1813</sup> *idem* (1984) Taf. II. 4, 6, 7, 12, 14,<sup>1814</sup> Taf. III. 1–3, 6, Taf. IV. 8; *Bondár* (1995) 251; *Tasić* (1995a) 125–126, Fig. 14.

**281. Belegiš–Gradac**

Settlement (?), burials and stray finds.

Excavation (Nikola Tasić, 1962).

<sup>1813</sup> According to Tasić, the Vattina-type jug with two handles found in the pit is an import of the Early “Vatin” group (*Tasić* [1968] 21, Abb. 8). Handled pot (*ibidem* Abb. 5; *idem* [1983] Sl. 9. G) later specified as coming from Ilok (*Tasić* [1984] Taf. II. 11).

<sup>1814</sup> The vessel form recalls that of the so-called Csór-type mugs of the Transdanubian Encrusted Pottery, cp. *P. Fischl–Kiss–Kulcsár* (1999).

- a. Vučedol culture: fortified settlement (Belegiš–Gradac (unpublished) and Belegiš–Šančine<sup>1815</sup>).
- b. Early Bronze Age (Somogyvár–Vinkovci culture):
1. Five vessels; stray finds (1954–55) (*Garašanin* [1954] 68–69, Szl. 7; *Trbuhović* [1956] 147, Sl. 6a–e; *Tasić* [1968] 23; *idem* [1976] 152–153; *idem* [1984] 24).
  2. Crouched inhumation grave without any grave goods; excavation (1962) (*Tasić* [1964] 26; *idem* [1968] 23).
  3. Crouched inhumation grave with grave goods (two handled vessels and a Vinkovci bowl); excavation (1962) (*Tasić* [1964] 26; *idem* [1968] 23, Abb. 12–13).
  4. Bowl fragment with incised linear decoration; stray find (1954–55) (*Trbuhović* [1956] 147, Sl. 1–3).
  5. One-handled mug; stray find (1954–55) (*Trbuhović* [1956] 147, Sl. 4).
  6. Bowl fragment with three ribs on the body; excavation (1962), unstratified find (*Tasić* [1968] 23; *idem* [1976] 153). Unpublished.
  7. Other stray finds: e. g. a two-handled vessel (*Tasić* [1968] 23). Unpublished.
- Trbuhović* (1956); *Tasić* (1962); *idem* (1964); *idem* (1968) 23, Taf. II. Abb. 12–13; *idem* (1971) 164–165; *Ecsedy* (1979a) 104; *Dimitrijević* (1982a) 32; *Tasić* (1983) 48, Tab. 5. 3–4; *Bondár* (1995) 251; *Tasić* (1995a) 115, Fig. 6.
- 282. Beograd–Rospi Čuprija**  
 Inurned burial (Grave 11).  
 Excavation (J. Todorović).  
 Inurned burial (Grave 11): one urn and three bowls.  
 Todorović identified it as a Hallstatt burial (*Todorović* [1956] 40–41, 61, Sl. 15–18). *Tasić* described it as a Nagyrév burial (*Tasić* [1975] 151–152), but later assigned it to the late Vinkovci period (*Tasić* [1984] 25). Hungarian research does not regard the site as a find spot of the Somogyvár–Vinkovci culture (*Ecsedy* [1979a]; *Bondár* [1995] 250–252).  
*Todorović* (1956) 40–41, 61, Sl. 15–18; *Tasić* (1976) 151–152; *idem* (1984) 25.
- \*283. Dobanovci–Ciglana**  
 Settlement.  
 Stray finds (1950–1970), excavations (Vojislav Trbuhović, 1954; Nikola Tasić, 1960, 1964, 1968, 1969, ca. 1000 m<sup>2</sup>).
- a. Late Vučedol culture: a larger pit (pit-dwelling?) yielding a bowl with cross shaped foot, decorated with pseudo-cord impressions and various other bowls decorated in the stab-and-drag style (*Tasić* [1984] 19). Only an interior decorated bowl with round, hollow foot was published (*Tasić* [1995a] 120–121, Fig. 10. 3).
- b. A mug, an unstratified find from the uppermost layer of the settlement, reflects a possible Vinkovci presence (*Tasić* [1968] 22, Abb. 11; *idem* [1983] Tab. V. 1); additional bowls are mentioned among the other stray finds (*Tasić* [1968] 22; *idem* [1976] 152 [Nagyrév culture]; *idem* [1984] 19 [Vinkovci culture]). Later publications quote a handled mug (*Tasić* [1983] Tab. V. 2). According to Nikola Tasić, the body fragment of a vessel with incised decoration resembles vessels of the Nagyrév culture (*Tasić* [1968] 22–23, Abb. 10).  
*Tasić* (1959); *idem* (1968) 22–23, Abb. 10–11; *idem* (1969); *idem* (1974) 190; *Dimitrijević* (1982a) 32; *Tasić* (1984) 19; *Bondár* (1995) 251; *Tasić* (1995a) 120–121, Fig. 10.
- \*284. Ostrikovac–Gradina (near Svetozarevo)**  
 Settlement.  
 Overlying the Kostolac and Vučedol occupation levels, Layer Id yielded fragments of interior decorated bowls with a chequerboard pattern and a few fragments of Bell Beaker pottery (*Stojić* [1996] Tab. VII. 11a–b). A flask is also known from the site (*Tasić* [1984] Taf. II. 3).  
*Tasić* (1984) Taf. II. 3; *Bondár* (1995) 253; *Stojić* (1996).
- \*285. Pančevo (Pancsova)–Donja varoš**  
 Settlement.  
 Characteristic Makó–Kosihy–Čaka vessel fragments among the Somogyvár–Vinkovci finds.  
*Grčki-Stanimirov* (1996) T. II. 5, T. III, T. IV. 1, 3–7.

<sup>1815</sup> Excavations in 1961–1963: Vučedol A fortified settlement (*Tasić* [1961] 164–165; *Trbuhović* [1967]; *Tasić* [1971] 164–165; *Jovanović* [1974] 170, Szl. 117; *Dimitrijević* [1977–78] 11, Taf. 4–6; *Tasić* [1995a] 115, Fig. 6, Pl. XXVI. 2, 4–8).



## **286. Petrovaradin (Pétervárad)—Fortress**

Settlement.

Rescue excavation (Jovan Koledin, 2002–2004).

Fragments of Bell Beaker vessels alongside late Vinkovci and proto-Nagyrev finds.

*Koledin* (2008).

## **287. Surduk–Marina**

Settlement.

Finds of the Baden, Kostolac, Vučedol and Vinkovci cultures came to light on the settlement lying on the Danube bank.

*Stojić* (2004).

## **288. Vizić–Golokut**

Settlement.

*Petrović* (1990); *idem* (1991); *Bondár* (1995) 254.

## **289. Vrdnik–Pećine**

Fortified (?) settlement.

Excavations (D. Popović, 1967, 1969).

Overlying the Kostolac occupation level was a layer yielding finds of the late Vučedol period. Intact and broken vessels of the Vinkovci period came to light from one pit. Somogyvár–Vinkovci finds were uncovered in the uppermost level of the settlement, in a layer mixed with late Vučedol period finds.

*Tasić* (1968) 22, Abb. 14. 13–18; *Ecsegy* (1979a) 104; *Dimitrijević* (1982a) 32; *Tasić* (1984) Taf. III. 4–5, 7, Taf. IV. 2, 7, 10; *Bondár* (1995) 254; *Tasić* (1995a) 150, Fig. 32; *Popović* (1997).

## **290. Zemun (Zimony)—Šljunkara**

Crouched inhumation burial (female).

Grave goods: eight vessels and a gold diadem.

*Vranić* (1991); *Bondár* (1995) 254.

## **Slovenia**

### **\*291. Krog–Za Raščico**

Settlement.

Salvage excavation (22,469 m<sup>2</sup>, in 1999, 2001–2002).

Large features (Diam. 10 m), traces of buildings (17 m x 10 m), an oven, two fireplaces and thirty larger features yielding an impressive number of pottery finds.

Two radiocarbon dates have been published for the settlement (from charcoal samples): 1. 3777±89 BP (2340 cal. BC [54%] 2110 BC), 2. 3710±75 BP (2210 cal. BC [62.3%] 2010).

*Šavel* (2005); *idem* (2006).

### **\*292. Ljubljana–Ig (Ljubljanska barje)**

Settlements.

Excavations (Karl Deschmann, 1875–1877; Tatjana Bregant, Paola Korošec, Josip Korošec, in 1950–60s; Zorko Harej in 1970s; Anton Velušček, Katarina Čufar in 2000s).

Ljubljana/Laibach culture/Ig I–II group (late Vučedol and Slovenian Somogyvár–Vinkovci group).

*Wosinsky* (1904); *Childe* (1929) Fig. 118–121; *Lozar* (1941) Sl. 3, Sl. 6, Sl. 8; *Schmidt* (1945) 152–155, Textbild 85–87; *Korošec* (1955); *idem* (1958–59); *Dimitrijević* (1961) 60–61; *Bóna* (1965a) Pl. XVII. 1–13, 18; *Korošec–Korošec* (1969); *Harej* (1974); *Dimitrijević* (1977–78); *Harej* (1978); *idem* (1982); *idem* (1986); *idem* (1987); *Govedarica* (1989a); *idem* (1989b); *Bondár* (1995) 252; *Tasić* (1995a) 142–143, Fig. 27, Pl. II. 7.

### **\*293. Založnica (near Kamnik pod Krimom)**

Settlement.

Excavations (1954, (1995) 1999, 2001).

Several finds (2495–2460 BC (1σ) 2500–2425 BC (2σ)).

*Velušček–Čufar* (2003).

## **Belotić–Bela Crkva / Žabari–Markovica–Priboj group**

### **294. Barama (Bare) (Tumulus II)**

Cremation tumulus burial.

Grave good: one-handled jug.

*Srejšović* (1976) 127, T. IV. 6, T. V.

### **295. Bela Crkva**

Tumulus burials.

*Garašanin* (1958).

### **296. Belotić**

Tumulus burials.

*Garašanin* (1958).

### **297. Klinci**

Tumulus burial.

*Garašanin* (1958) 13–14; *Bóna* (1965a) 45; *Bondár* (1995) 253.

### **298. Markovica**

Tumulus burial.

*Bóna* (1965a) 45; *Bondár* (1995) 252.

### **299. Negrišori**

Tumulus burial.

*Bóna* (1965a) 44–45, Fig. 2; *Bondár* (1995) 253.

### **300. Priboj**

Tumulus burial (1892).

*Garašanin* (1958) 90; *Bóna* (1965a) 44, Pl. XVII. 16–17; *Bondár* (1995) 253.

### **301. Robaje**

Tumulus burial.

*Bóna* (1965a) 45; *Bondár* (1995) 254.

### **302. Zarub**

Tumulus burial.

*Garašanin* (1954) 43; *Bóna* (1965a) 45.

### **303. Žabari**

Tumulus burial.

*Bóna* (1965a) 45; *Bondár* (1995) 254.

## **Somogyvár–Ada group**

### **304. Ada (Ada)**

Stray find.

Basal fragment of a pot. H. 16.2 cm.

*Horváth* (1984a) 18, Tab. VII. 3.

### **305. Ada (Ada)–Komlósi G. brick factory**

Stray find.

According to the diary of Ferenc Móra, over 200, mostly crouched inhumation burials were destroyed in the area since 1889.

Jug with divided handle. H. 13.9 cm.

*Horváth* (1984a) 10, Tab. I. 1.

### **306. (Szeged)–Algyő-bank of the Tisza**

Stray find.

Fragment of a jug with cylindrical neck (H. 10.5 cm) and basal fragment of a jug.

*Kürti* (1974) Figs 29–30; *Horváth* (1984a) 10, Tab. II. 2.

### **307. Ásotthalom–Borgazdaság**

Inhumation burials.

Handled mugs. H. 7.1 cm, 9.6 cm, 9.8 cm.

*Kürti* (1974) Figs 31–33; *Horváth* (1984a) 15, Tab. V. 1–3.



**308. Hajdukovo (Hajdújárás)–Köröspart**

Cremation burial.

Grave good: jug with asymmetrical handles. H. 28 cm.

*Horváth* (1984a), 13, Tab. III. 1, Tab. IV. 1.

**309. Hajdukovo (Hajdújárás)–Székelyhalom**

Stray find.

One-handed jug. H. 11.1 cm.

*Horváth* (1984a) 15, Tab. III. 2, Tab. IV. 2.

**310. Radanovac–Crnava Zastava**

Inhumation burial (1955)

Grave good: jug with divided handle. H. 18.9 cm.

*Horváth* (1984a) 10, Tab. I. 2.

**311. Radanovac**

Stray find.

One handled mug. H. 5.2 cm.

*Horváth* (1984a) 10, Tab. II. 1.

**\*312. Senta (Zenta)–Pobeda brick factory**

Stray finds.

1. Vessel with cylindrical neck. H. 9.2 cm.

2. Interior decorated bowl. H. 5.6 cm.

*Horváth* (1984a) 15, Tab. VI. 1, 3–4.

**313. Sombor (Zombor)**

Stray find.

Handled jug.

*Horváth* (1984a) 15, Tab. VI. 2.

**314. (Baks)–Sövényháza–Kötörés**

Stray find.

Basal fragment of a jug. H. 6.4 cm.

*Horváth* (1984a) 10, Tab. II. 3.





## ABBREVIATIONS

AAC <sup>1816</sup>	Acta Archaeologica Carpathica (Kraków)
AASzeg	Acta Antiqua et Archaeologica (Szeged)
ActaArchHung	Acta Archaeologica Academiae Scientiarum Hungaricae (Budapest)
ActaMN	Acta Musei Napocensis (Cluj)
ActaMuseiPapensis	Acta Musei Papensis/Pápai Múzeumi Értesítő (Pápa)
AI	Archaeologia Iugoslavica (Beograd)
AISC	Anuarul Institutului de Studii Clasice (Cluj)
AKorr	Archäologisches Korrespondenzblatt (Mainz)
ArchA	Archaeologia Austriaca (Wien)
ArchÉrt	Archaeologiai Értesítő (Budapest)
ArchHung	Archaeologia Hungarica (Budapest)
ArchKözl	Archaeologiai Közlemények (Budapest)
AP	Arheološki Pregled (Beograd)
APolski	Archeologia Polski (Wrocław)
AR	Archeologické Rozhledy (Praha)
ASF	Archaeologica Slovaca Fontes (Bratislava)
AUBSH	Annales Universitatis Budapestinensis de Rolando Eötvös nominatae. Sectio Historica
AUC	Acta Universitatis Carolinae (Praha)
AV	Arheološki Vestnik (Ljubljana)
AVANS	Archeologické Výskumy a Nálezy na Slovensku (Nitra)
BÁMÉ	A Béri Balogh Ádám Múzeum Évkönyve (Szekszárd)
BAR-IS	British Archaeological Reports–International Series (Supplementary) (Oxford)
BHBl	Burgenländische Heimatblätter (Eisenstadt)
BiMÉ	A Bihari Múzeum Évkönyve (Berettyóújfalu)
BMMK	A Békés Megyei Múzeumok Közleményei (Békéscsaba)
BRGK	Bericht des Römisch-Germanischen Kommission (Berlin)
BudRég	Budapest Régiségei (Budapest)
CommArchHung	Communicationes Archaeologicae Hungariae (Budapest)
DissArch	Dissertationes archaeologicae ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae (Budapest)
DissPan	Dissertationes Pannonicae (Budapest)
DMÉ	A Debreceni Déri Múzeum Évkönyve (Debrecen)
Dolg	Dolgozatok a Szegedi Tudományegyetem Régiségtudományi Intézetéből (Szeged)
DuSz	Dunántúli Szemle (Szombathely)
FAM	Fontes Archaeologiae Moravicae (Brno)
FolArch	Folia Archaeologica (Budapest)
FontArchHung	Fontes Archaeologici Hungariae (Budapest)
FÖ	Fundberichte aus Österreich (Wien)
FUFG	Forschungsberichte zur Ur- und Frühgeschichte (Wien)

<sup>1816</sup> Cp. *M. Tulok*: Abbreviations of periodicals and series of archaeology and auxiliary sciences. *ActaArchHung* 36 (1984) 333–384.

GCBI	Godišnjak Centra za Balkanološka Ispitivanja Akademije Nauka i Umjetnosti Bosne i Hercegovine (Sarajevo)
Glasnik SAD	Glasnik Srpskog Arheološkog Društva (Beograd)
GMDS	Glasnik Muzejskega Društva za Slovenijo (Ljubljana)
GMGB	Godišnjak Muzeja Grada Beograda (Beograd)
GZM	Glasnik Zemaljskog Muzeja u Sarajevu (Sarajevo)
HCK	Historica Carpatica (Košice)
HOMÉ	A Herman Ottó Múzeum Évkönyve (Miskolc)
IBAI	Izvestija na Bulgarskija Arheologičeski Institut (Sofija)
IPH	Inventaria Praehistorica Hungariae (Budapest)
JAMÉ	A Nyíregyházi Jós András Múzeum Évkönyve (Nyíregyháza)
JMV	Jahresschrift für Mitteldeutsche Vorgeschichte, Halle/Saale
JPMÉ	A Janus Pannonius Múzeum Évkönyve (Pécs)
MAG	Mitteilungen der Anthropologischen Gesellschaft (Wien)
MBAEU	Mitteilungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte (Berlin)
MFMÉ	A Móra Ferenc Múzeum Évkönyve (Szeged)
MittArchInst	Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften (Budapest)
MittArchInst-Bh	Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften. Beiheft (Budapest)
MKBKM	Múzeumi Kutatások Bács-Kiskun megyében (Kecskemét)
MKCsM	Múzeumi Kutatások Csongrád megyében (Szeged)
OA	Opuscula Archaeologica (Zagreb)
PA	Památky Archeologické (Praha)
PAS	Prähistorische Archäologie in Südosteuropa (Berlin)
PBF	Prähistorische Bronzefunde (München)
PHPraha	Praehistorica. Acta Instituti Praehistorici Universitatis Carolinae (Praha)
Poročilo	Poročilo o Raziskovanju Paleolitika, Neolitika in Eneolitika v Sloveniji (Ljubljana)
PMÉ	Pécs sz. kir. Város Majorossy Imre Múzeumának Értesítője (Pécs)
PPS	Proceedings of the Prehistoric Society (Cambridge)
PreAlp	Preistoria Alpina (Trento)
Pulpudeva-Supp	Pulpudeva Supplementum (Sofia)
PV	Přehled Výzkumů (Brno)
PZ	Prähistorische Zeitschrift (Berlin)
PZb	Podravski Zbornik (Koprivnica)
RégFüz	Régészeti Füzetek (Budapest)
RGF	Römisch-Germanische Forschungen (Berlin)
RKM	Régészeti Kutatások Magyarországon (Archaeological Investigations in Hungary) (Budapest)
RVM	Rad Vojvodanskih Muzeja (Novi Sad)
SAB	Studie Archeologického Ústavu Československé Akademie Věd v Brně (Brno)
Satu Mare	Satu Mare. Studii și Comunicări (Satu Mare)
SCIVA	Studii și Cercetări de Istorie Veche și Arheologie (București)



SIA	Slovenská Archeológia (Bratislava)
SMK	Somogyi Múzeumok Közleményei (Kaposvár)
SMMS	Sborník Muzeálnej Slovenskej Spoločnosti (Martin)
StComit	Studia Comitatus (Cegléd)
SzMMÉ	A Szolnok Megyei Múzeumok Évkönyve (Szolnok)
ŠtZ	Študijné Zvesti Archeologického Ústavu SAV (Nitra)
UPA	Universitätsforschungen zur prähistorischen Archäologie (Bonn)
VAH	Varia Archaeologica Hungarica (Budapest)
VAMZ	Vjesnik Arheološkog Muzeja u Zagrebu (Zagreb)
VF	Vorgeschichtliche Forschungen (Berlin, Rahden)
VHAD	Vjesnik Hrvatskog Arheološkog Društva (Zagreb)
VMMK	A Veszprém Megyei Múzeumok Közleményei (Veszprém)
VSz	Vasi Szemle (Szombathely)
WMMÉ	A Wosinsky Mór Múzeum Évkönyve (Szekszárd)
WPZ	Wiener Prähistorische Zeitschrift (Wien)
ZbSNM	Zborník Slovenského Národného Muzea. História (Bratislava)
ZGy	Zalai Gyűjtemény (Zalaegerszeg)

Balaton Museum	Balaton Múzeum, Keszthely
BHM	Budapest History Museum, Budapest
BMM	Munkácsy Mihály Múzeum, Békéscsaba
CKM	Kossuth Múzeum, Cegléd
EBM	Balassa Bálint Múzeum, Esztergom
DDM	Déri Múzeum, Debrecen
Dráva Museum	Dráva Múzeum, Barcs
HAS AI	Hungarian Academy of Sciences, Archaeological Institute, Budapest
HNM	Hungarian National Museum, Budapest
SzIKM	Szent István Király Múzeum, Székesfehérvár
JAM	Jósa András Múzeum, Nyíregyháza
JPM	Janus Pannonius Múzeum, Pécs
KDM	Kuny Domokos Múzeum, Tata
MFM	Móra Ferenc Múzeum, Szeged
NHM PA	Naturhistorisches Museum, Prähistorische Abteilung, Vienna
RRM	Rippl-Rónai Múzeum, Kaposvár
TGyM	Thúry György Múzeum, Nagykanizsa
TJM	Thorma János Múzeum, Kiskunhalas
WMM	Wosinsky Mór Múzeum, Szekszárd
XJM	Xantus János Múzeum, Győr
ZGM	Göcseji Múzeum, Zalaegerszeg

cat. no.	catalogue number
inv. no.	inventory number
L.	length
W.	width

H.	height
Th.	thickness
Diam.	diameter
dR.	diameter of rim
dB.	diameter of base
D.	depth



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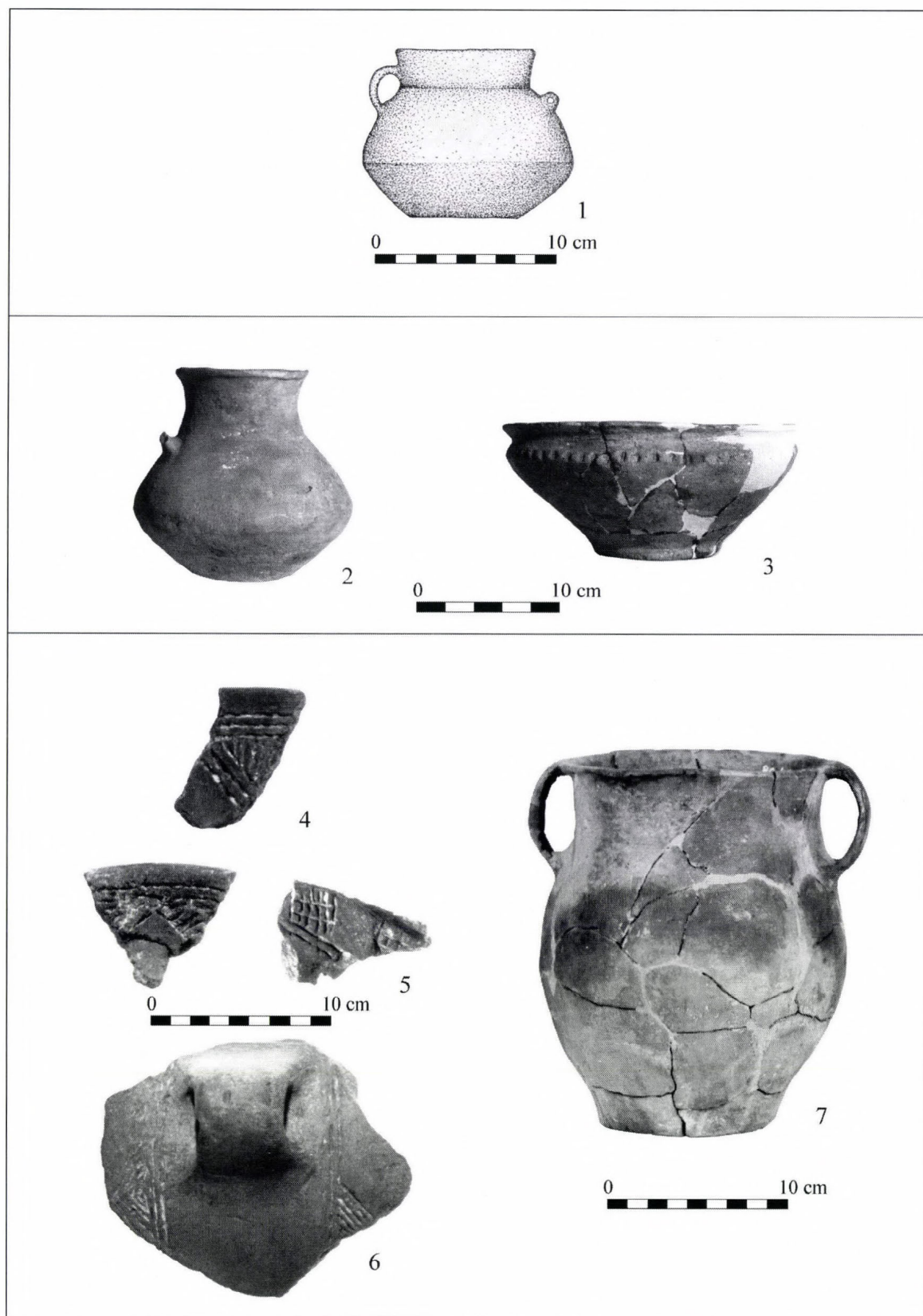




## **PLATES**

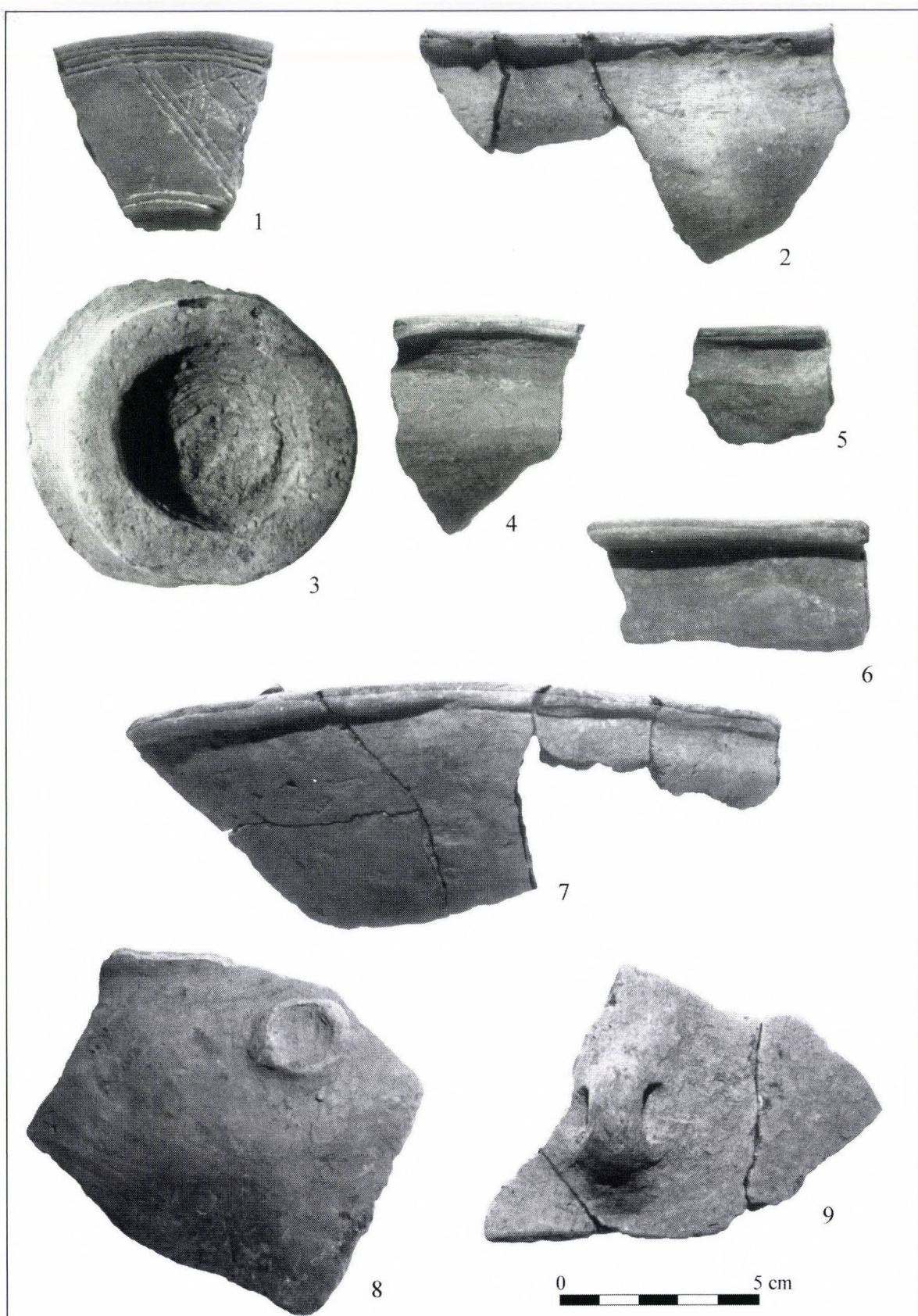






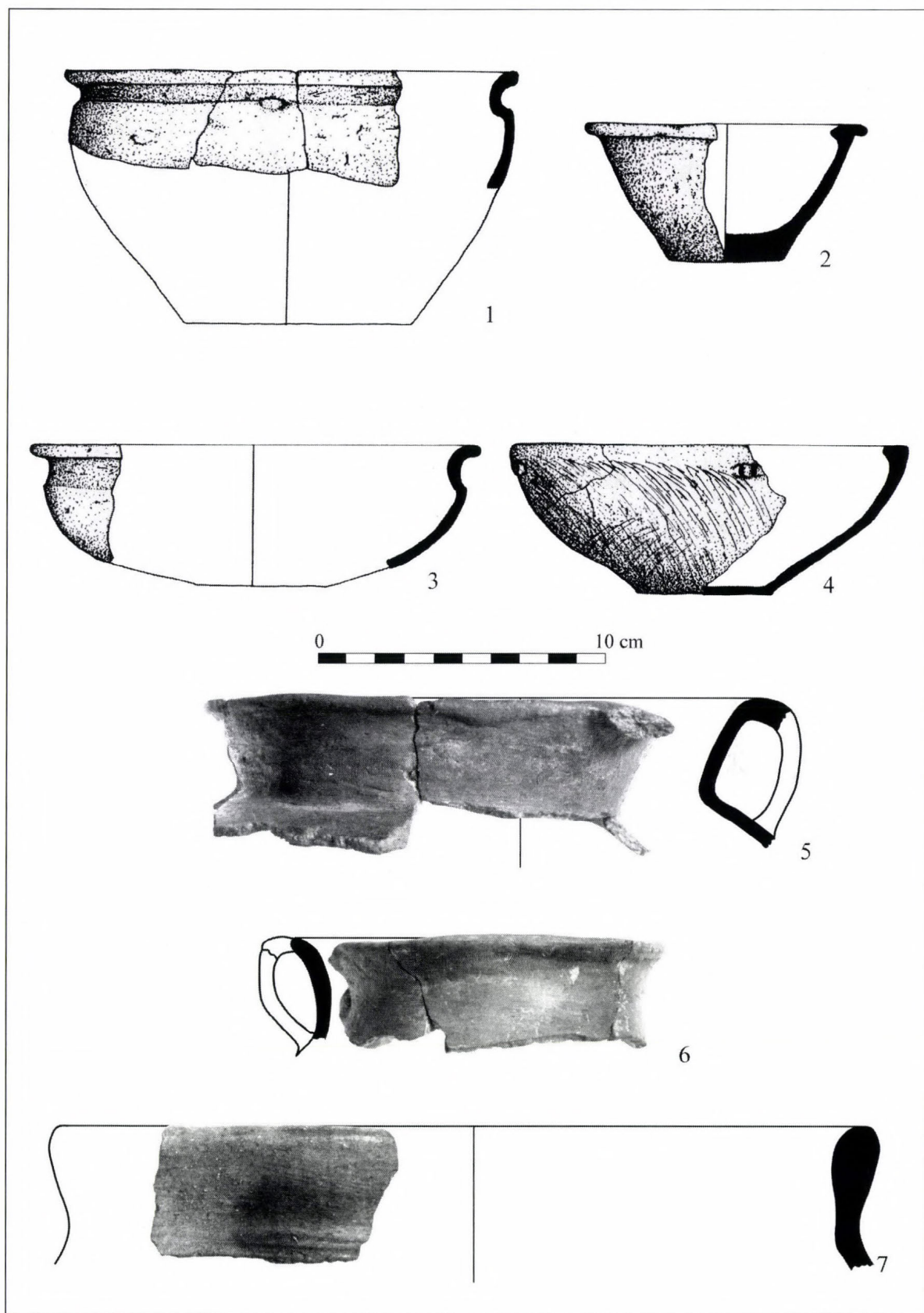
*Pl. 1. Early Bronze Age finds from south-eastern Hungary*

1. Between Szentes and Orosháza (MKČ cat. no. 251), 2–3. Békéscsaba–Alvégi legelő, majorok (MKČ cat. no. 29), 4–7. Battonya–Vörös Október Co-operative (MKČ cat. no. 20)

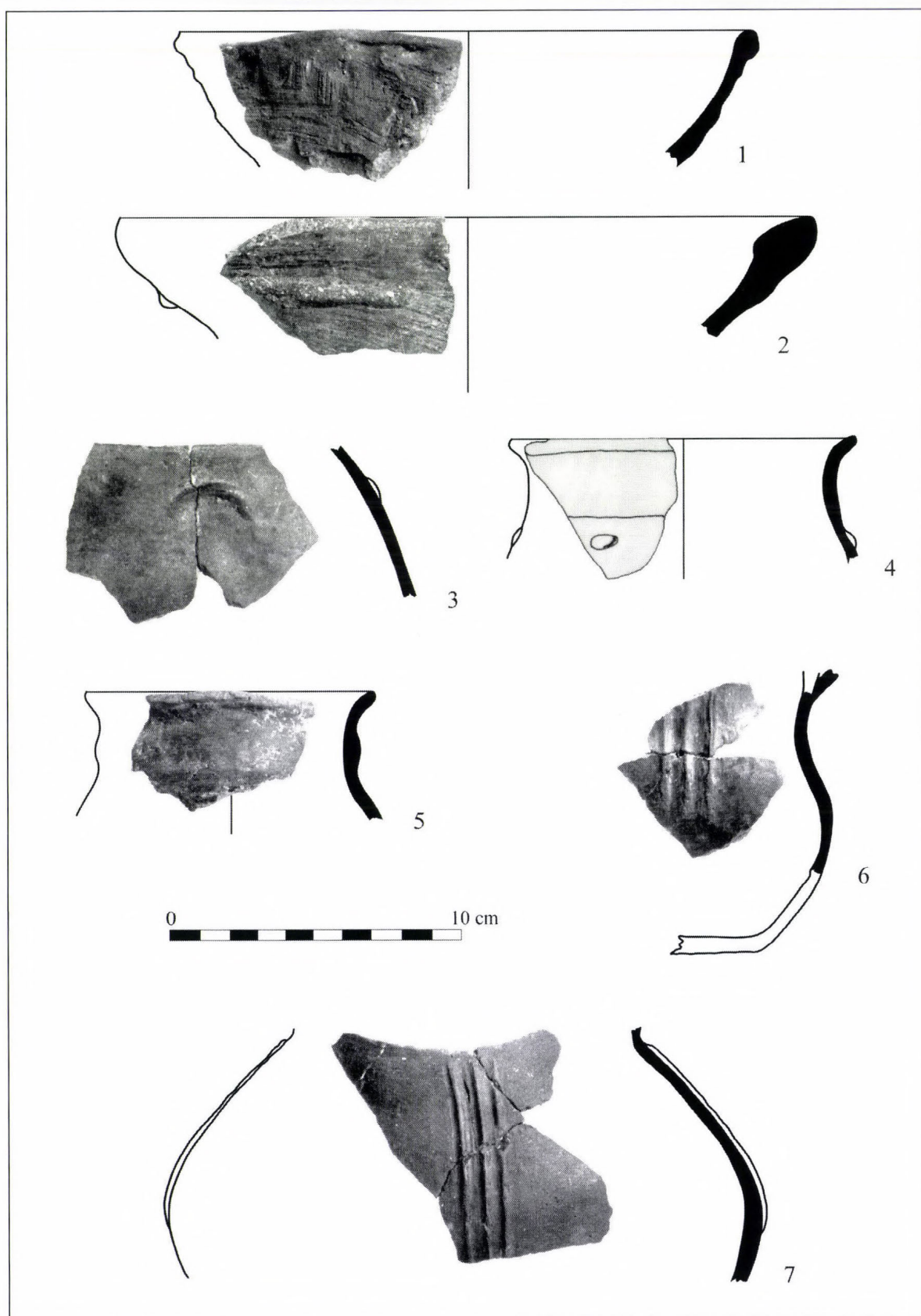


Pl. 2. Early Bronze Age finds from south-eastern Hungary  
1-9. Örménykút-Szilai halom (MKČ cat. no. 203)



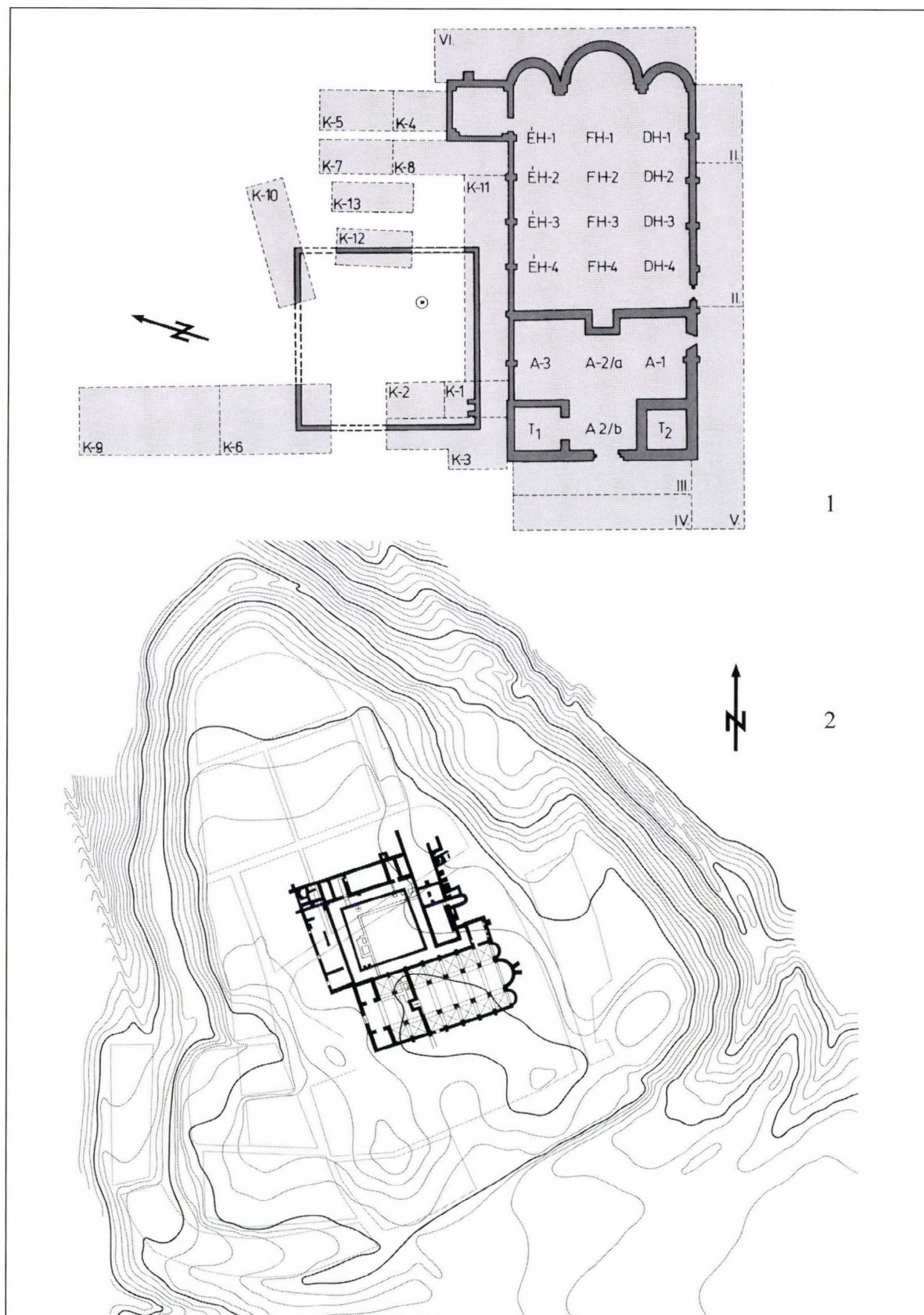


*Pl. 3.* Early Bronze Age finds from northern Hungary  
1–7. Kömlő–Szövetkezeti földek (MKČ cat. no. 158)



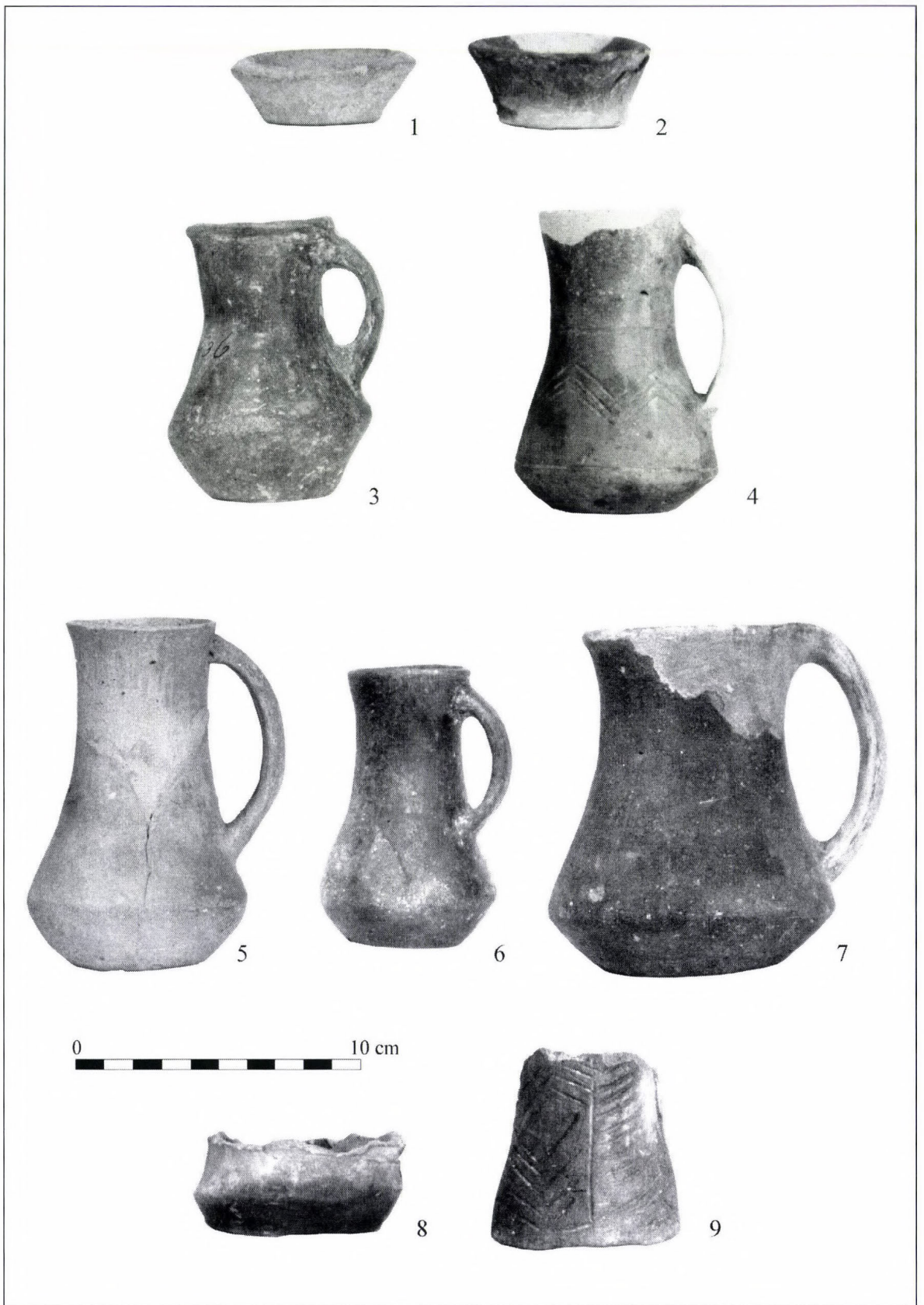
Pl. 4. Early Bronze Age finds from northern Hungary  
1–7. Kömlő–Szövetkezeti földék (MKČ cat. no. 158)





Pl. 5. Somogyvár–Kupavárhegy (SV cat. no. 198)

1. Ground plan of the Bendectine abbey, 2. the site (after Bakay [1975]; Honti [1994a]; Bakay [1997])

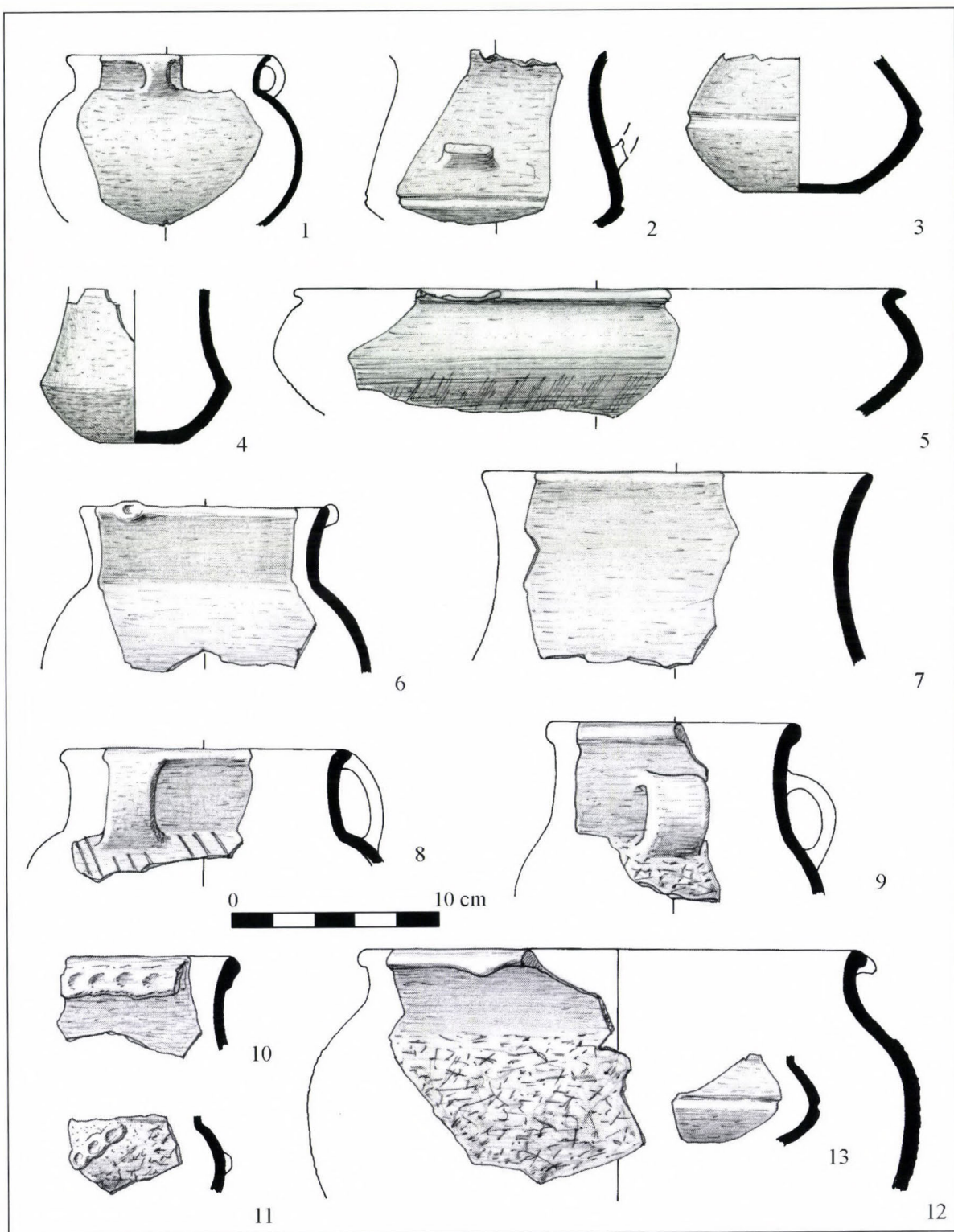


*Pl. 6. Somogyvár-Kupavárhegy*  
1–9. Stray finds (1926, 1928)



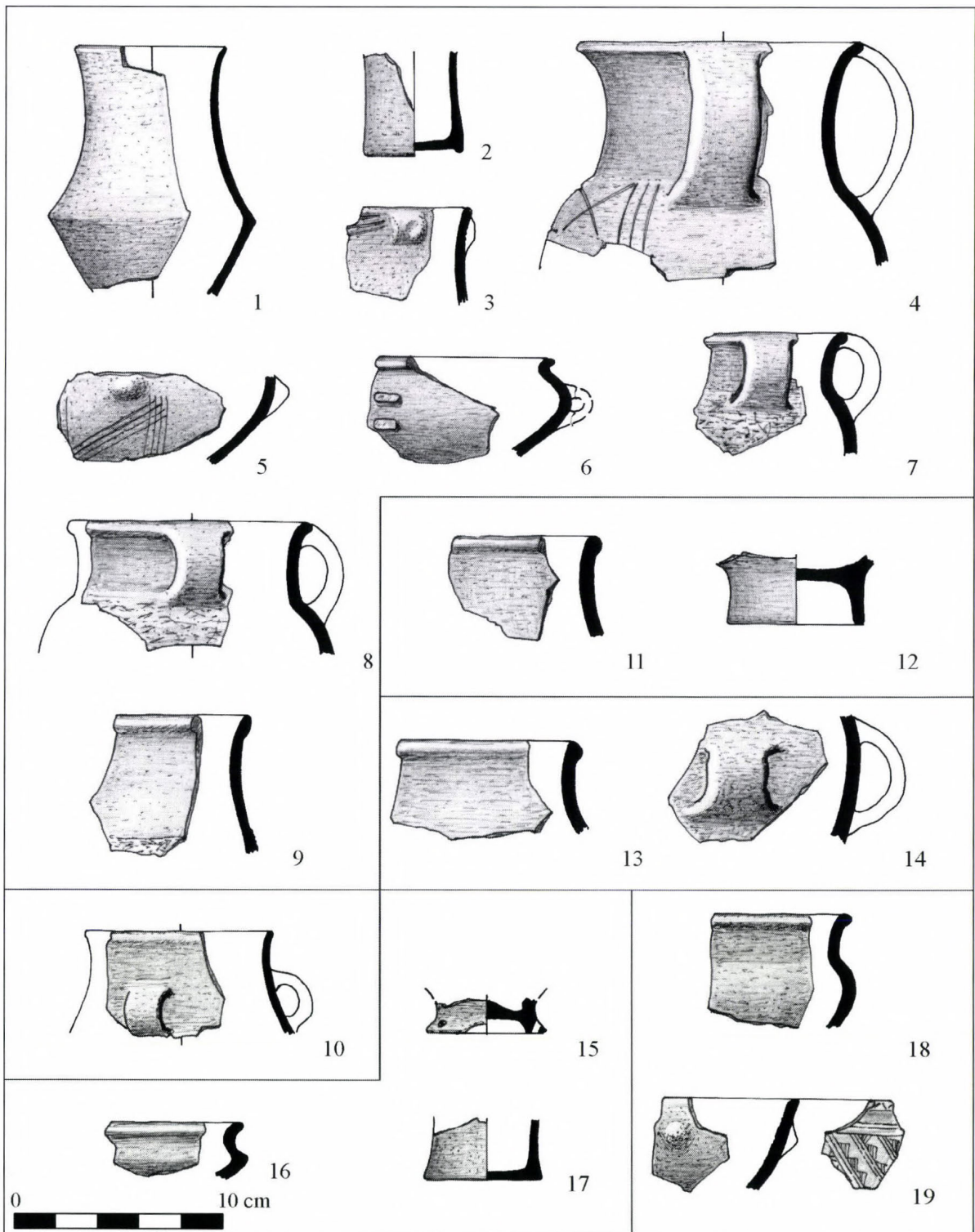


*Pl. 7. Somogyvár-Kupavárhegy*  
1-3. Stray finds (1926, 1928)



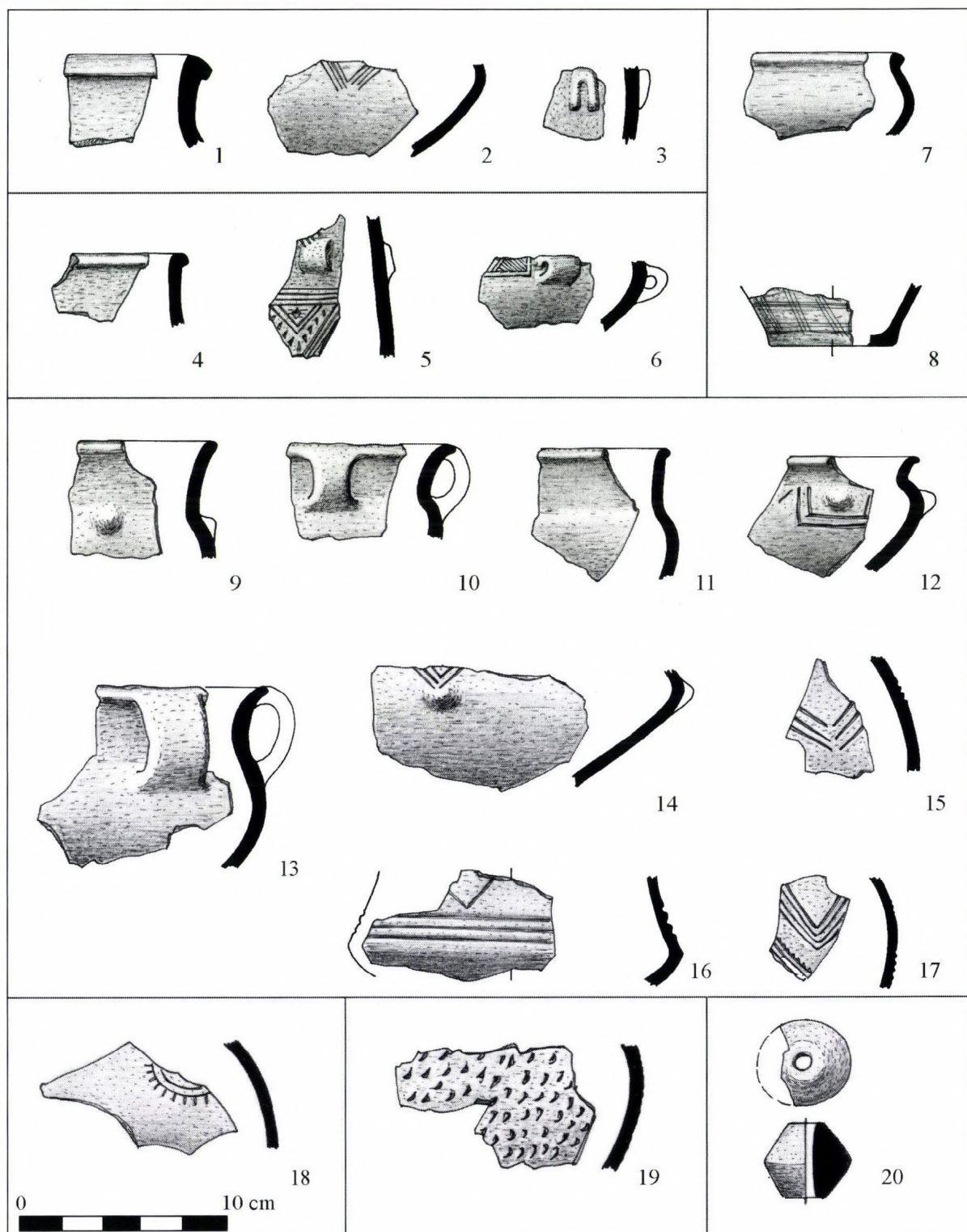
*Pl. 8. Somogyvár-Kupavárhegy*  
 1–2, 4–5, 7–11. Selection of the unstratified finds from Kornél Bakay's excavations (1972–1987),  
 3, 6, 12–13. stray finds from István Sándor's plot





*Pl. 9. Somogyvár–Kupavárhegy*

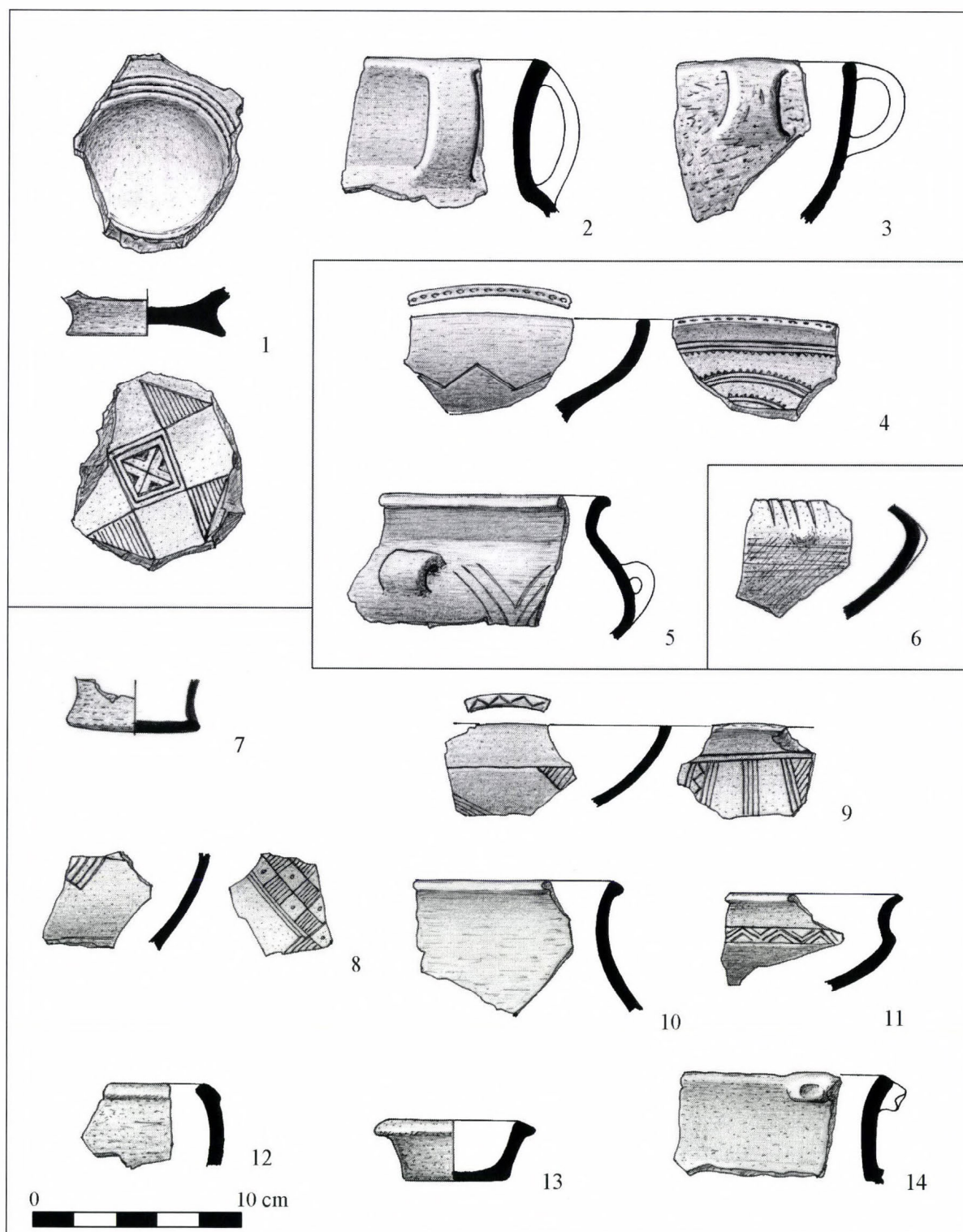
1–9. Selection of the unstratified finds from Kornél Bakay's excavations (1972–1987),  
 10. Trench VII/between 35 and 0 cm, 11–12. Trench XIII/between -160 and -340 cm,  
 13–14. Trench XIV/between 70 and 10 cm, 15–17. Trench XIV/between 70 and 20 cm,  
 18–19. Trench XV/between 45 and 10 cm



*Pl. 10. Somogyvár-Kupavárhegy*

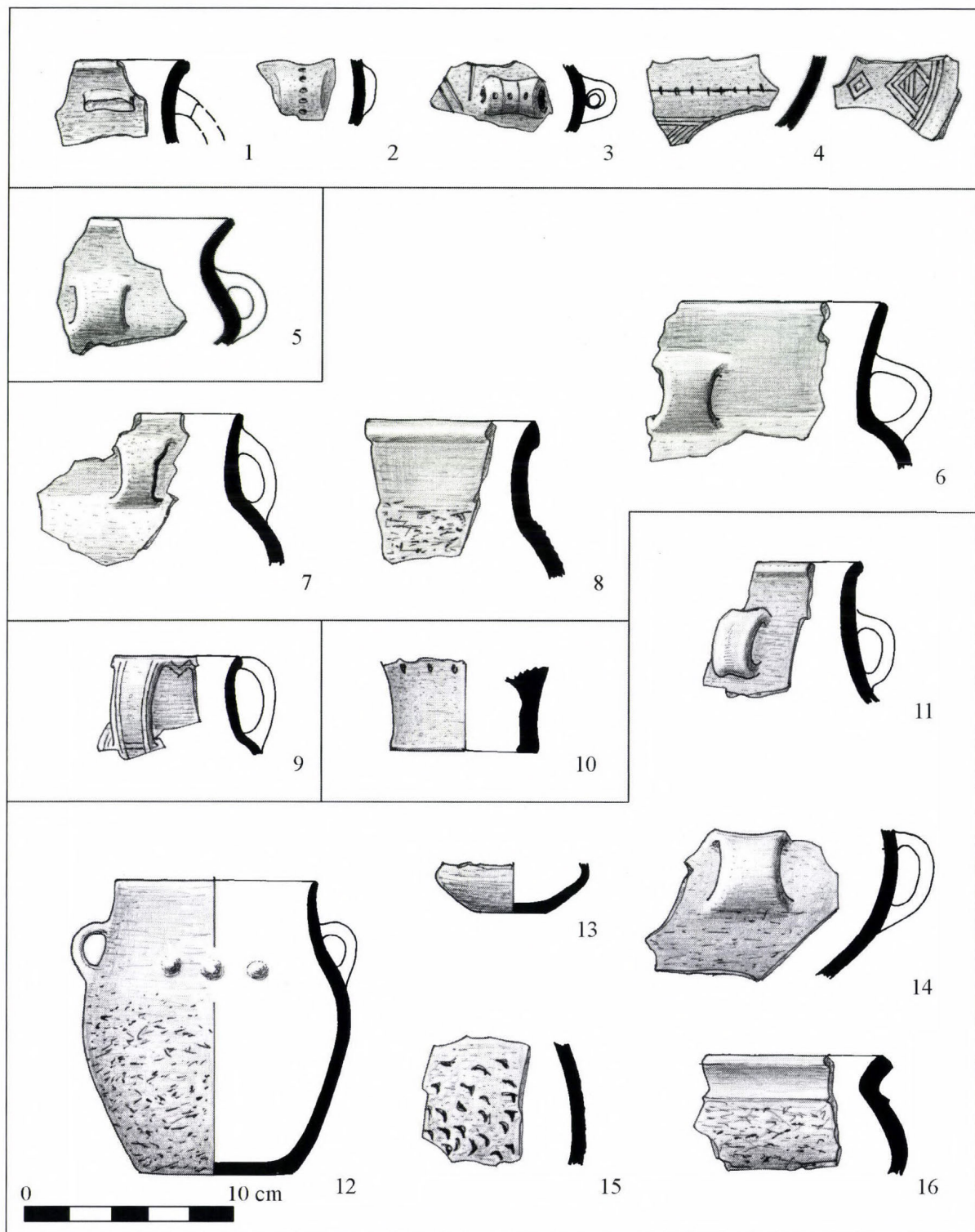
1-3. Trench XV/between 60 and 20 cm, 4-6. Trench XV/from the fill of an oven of unknown date,  
 7-8. Trench XVI/between 165 and 75 cm, 9-18. Trench XVII/Pit 14, 19. Trench XVII/Pit 16,  
 20. Trench XVIII/between -330 and -430 cm





*Pl. 11. Somogyvár-Kupavárhegy*

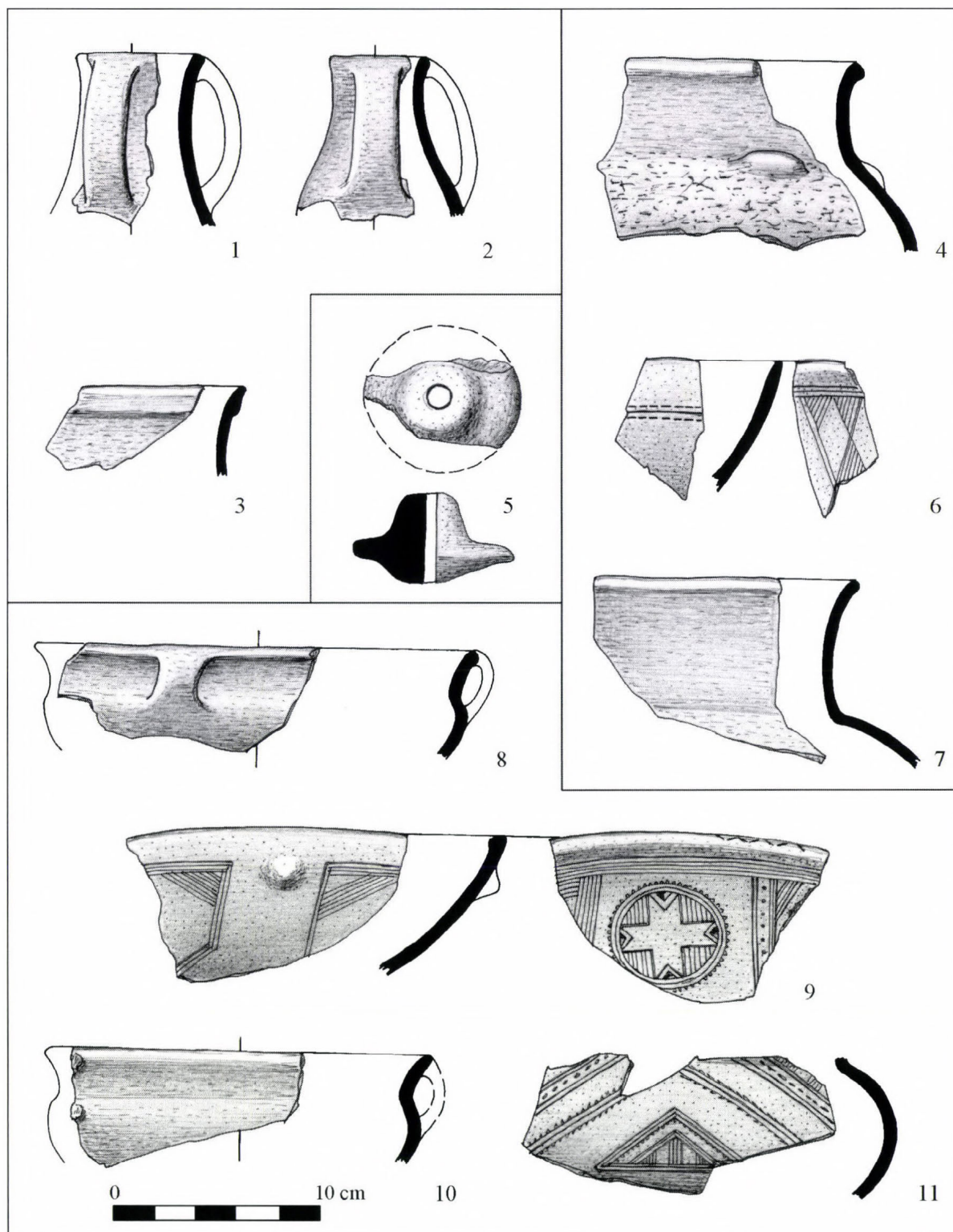
1–3. Trench XVII/between 45 and 10 cm, 4–5. Trench XVIII/A/between -100 and -160 cm,  
 6. Trench XX/between 200 and 150 cm, 7. Trench XXI/between 110 and -40 cm,  
 8. Trench XXI/between 145 and 80 cm, 9. Trench XXI/between 145 and -20 cm,  
 10–11. Trench XXI/medieval moat, between 145 and -40 cm, 12–14. Trench XXI/between 200 and 160 cm



*Pl. 12. Somogyvár–Kupavárhegy*

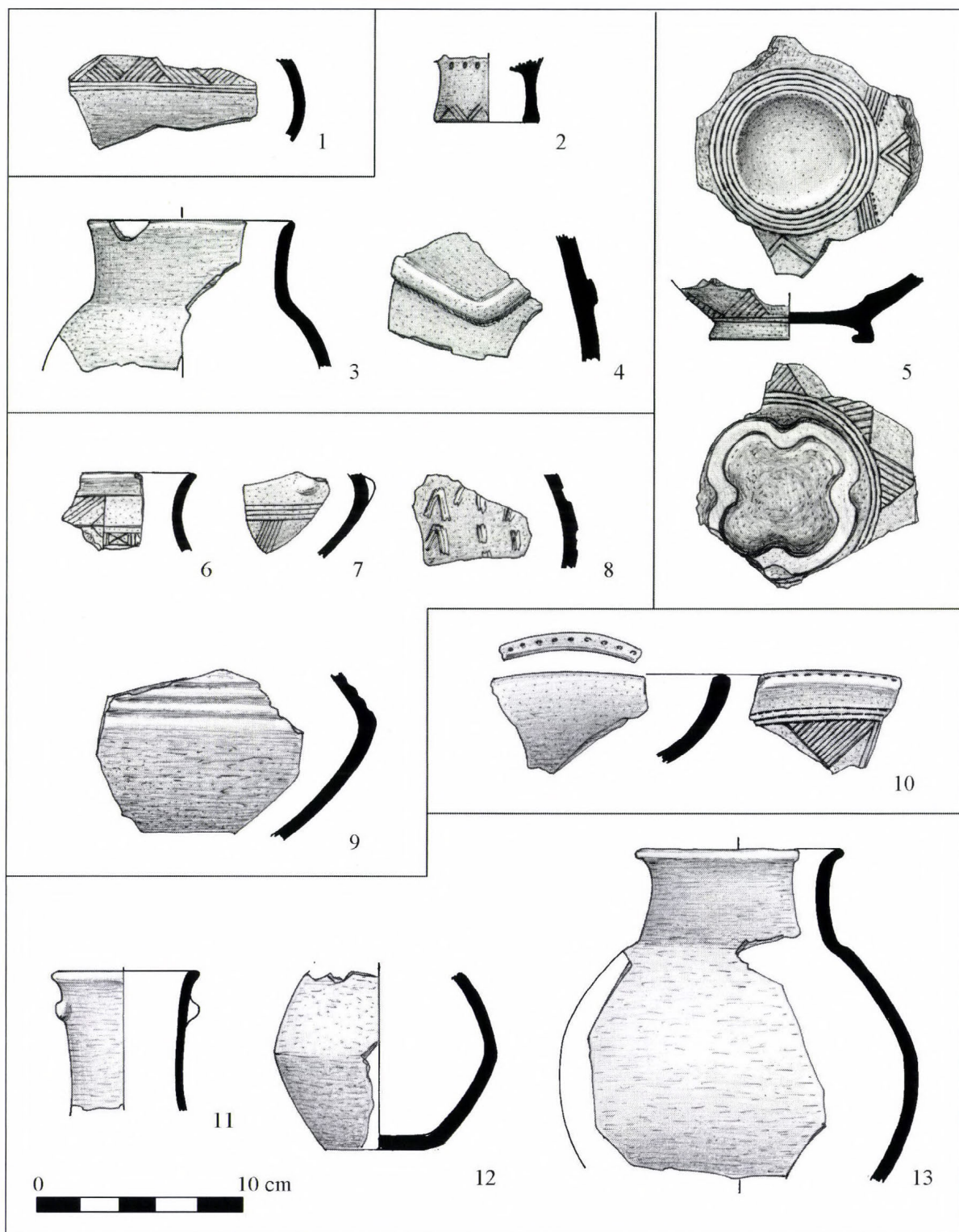
- 1–3. Trench XXII/between 90 and 10 cm, 4. Trench XXII/from the fill of the medieval moat,  
 5. Trench XXIII/unstratified find, 6. Trench XXIV/between 20 and 0 cm,  
 7. Trench XXIV/A/between 30 and 70 cm, 8. Trench XXIV/A/Pit (?), 9. Trench XXV/between 70 and 10 cm,  
 10. Trench XXV/K/between 0 and -60 cm, 11–16. Trench XXV/K/between -60 and -120 cm





*Pl. 13. Somogyvár-Kupavárhegy*

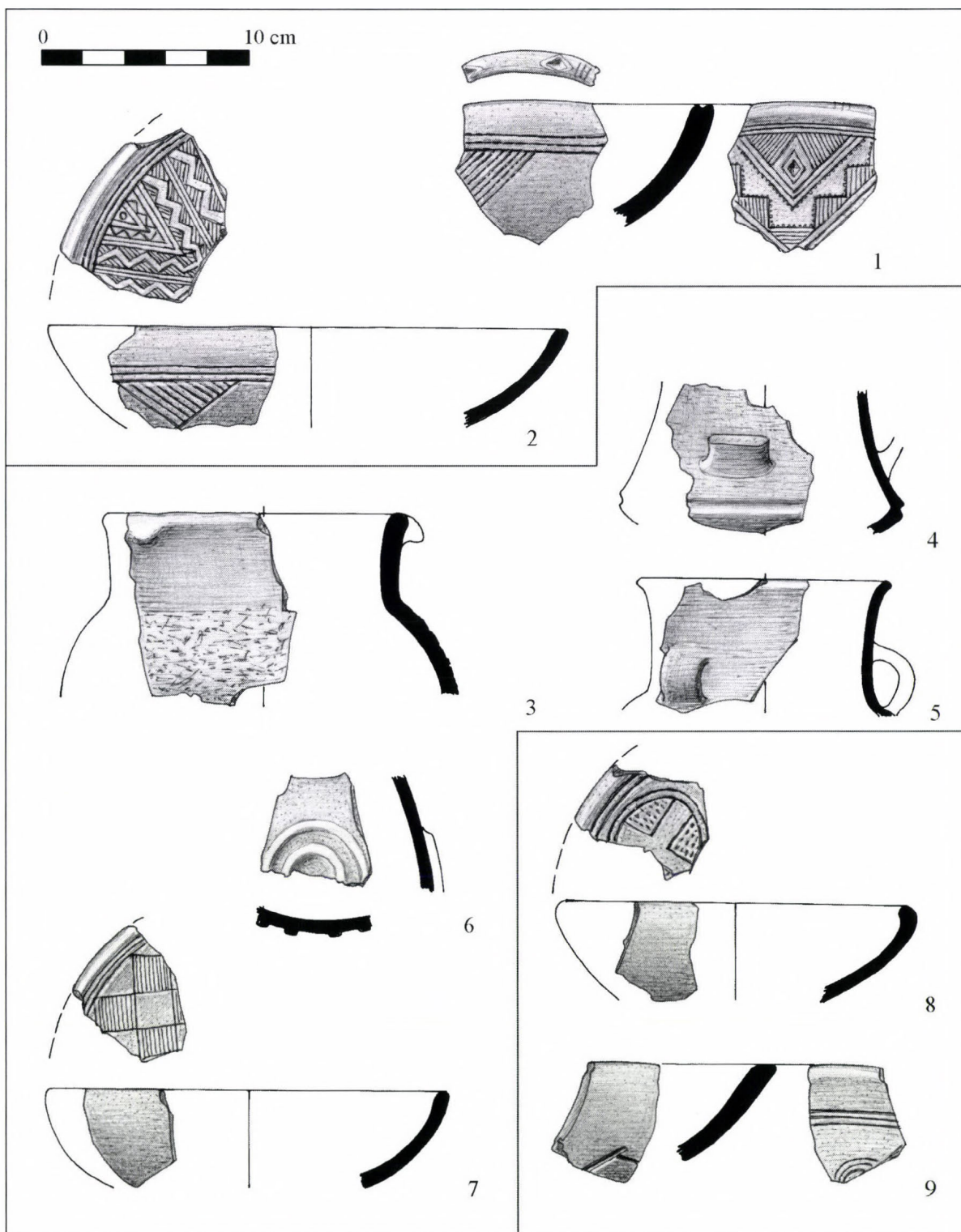
1–3. Trench XXV/K/between -120 and -160 cm, 4, 6–7. Trench XXV/K–P/between -350 and -450 cm,  
5. Trench XXV/K/between -200 and -270 cm, 8–11. Trench XXV/K/unstratified finds



*Pl. 14. Somogyvár-Kupavárhegy*

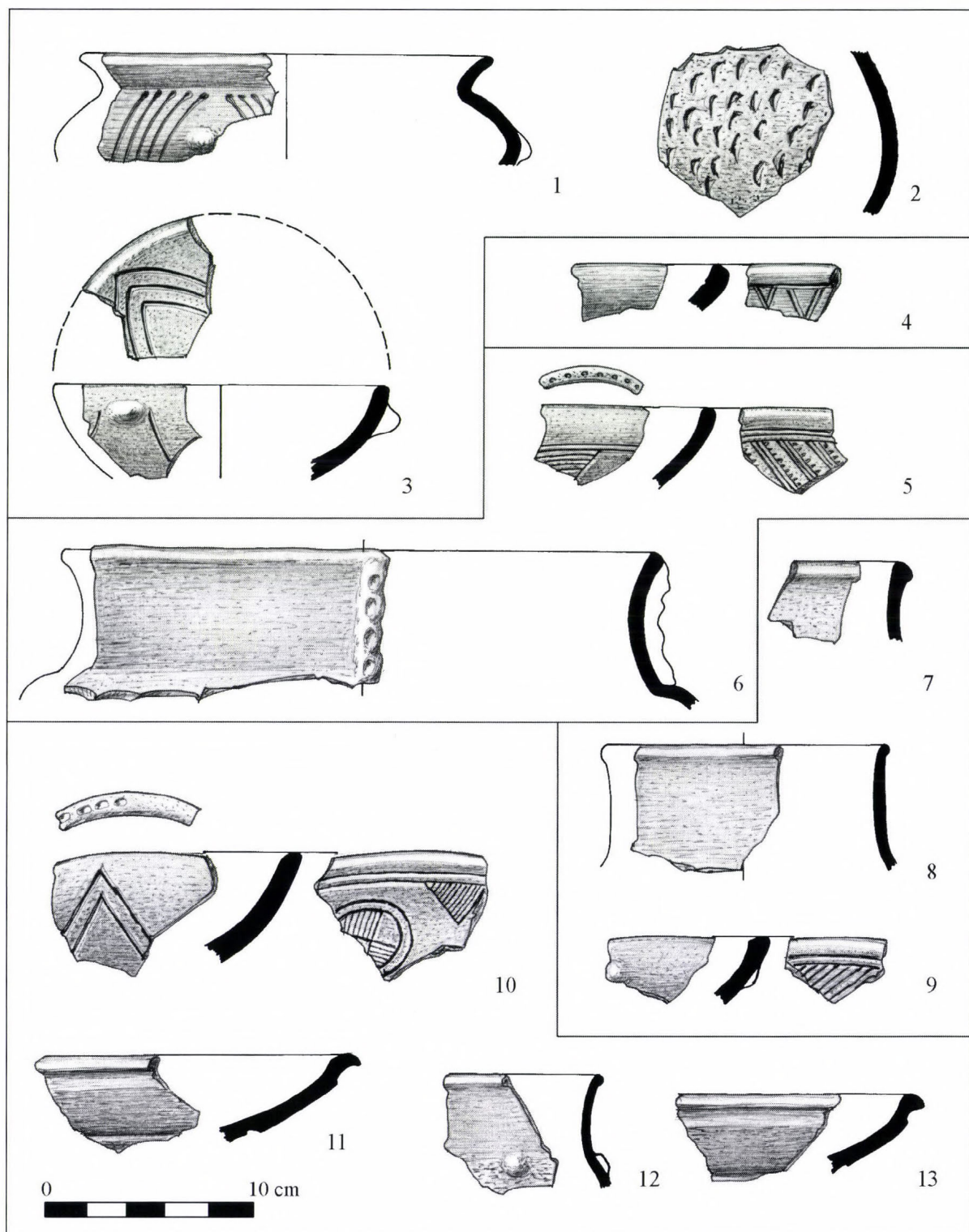
1. Trench XXV/K/unstratified find, 2-4. Trench D-1/2/between -40 and -105 cm,  
5. Trench XXV/K-P/unstratified find, 6-9. Trench Du-3/between -80 and -115 cm,  
10. Trench ÉH-4/between 170 and 220 cm, 11-13. Trench Du/-82 cm





*Pl. 15. Somogyvár-Kupavárhegy*

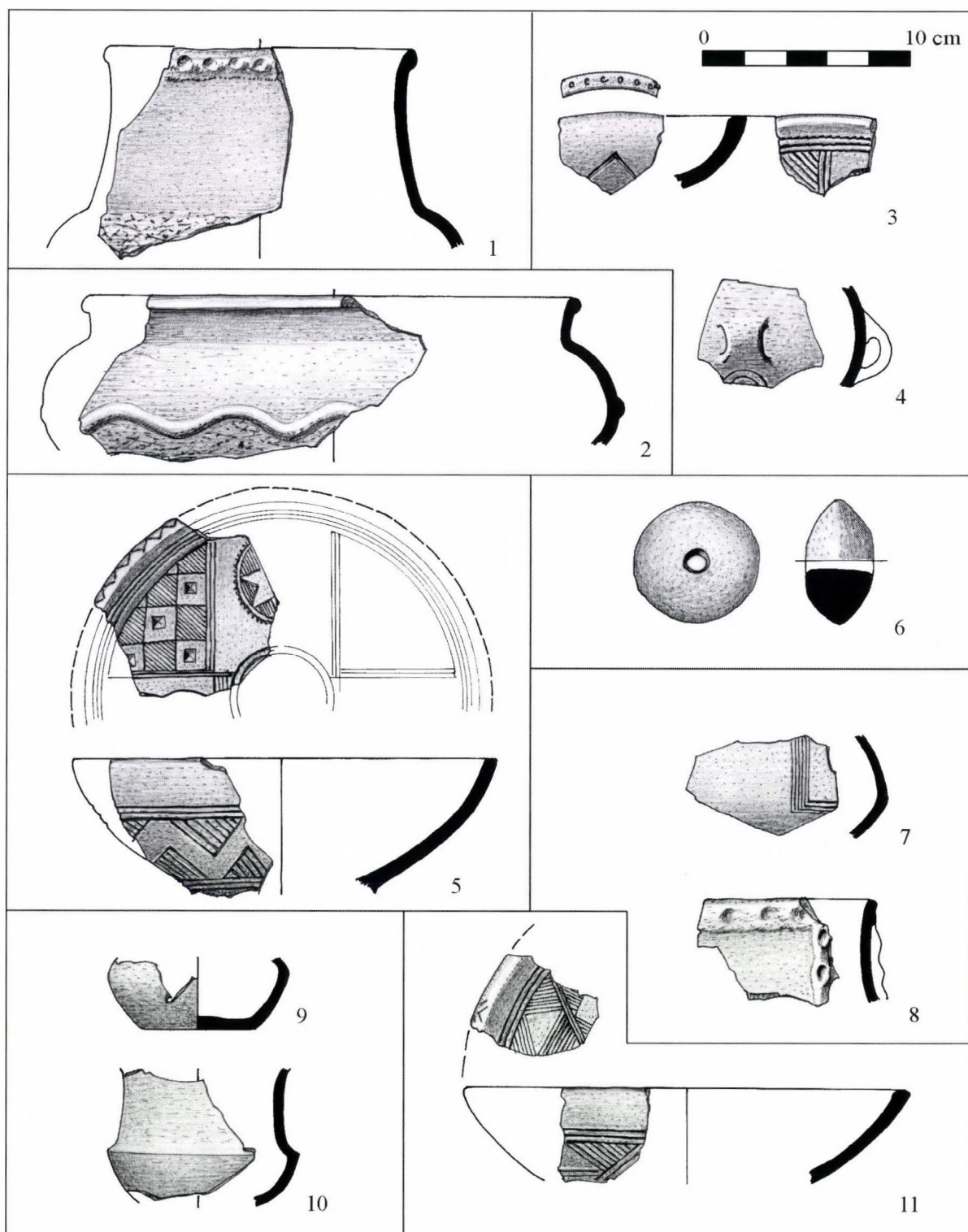
1–2. Trench Du/unstratified finds, 3–6. Trench ÉH–4/between 170 and 220 cm,  
 7. Trench ÉH–4/between 149 and 105 cm, 8. Trench DH–2–3/between -100 and -120 cm,  
 9. Trench DH–2–3/between -95 and -115 cm



*Pl. 16. Somogyvár-Kupavárhegy*

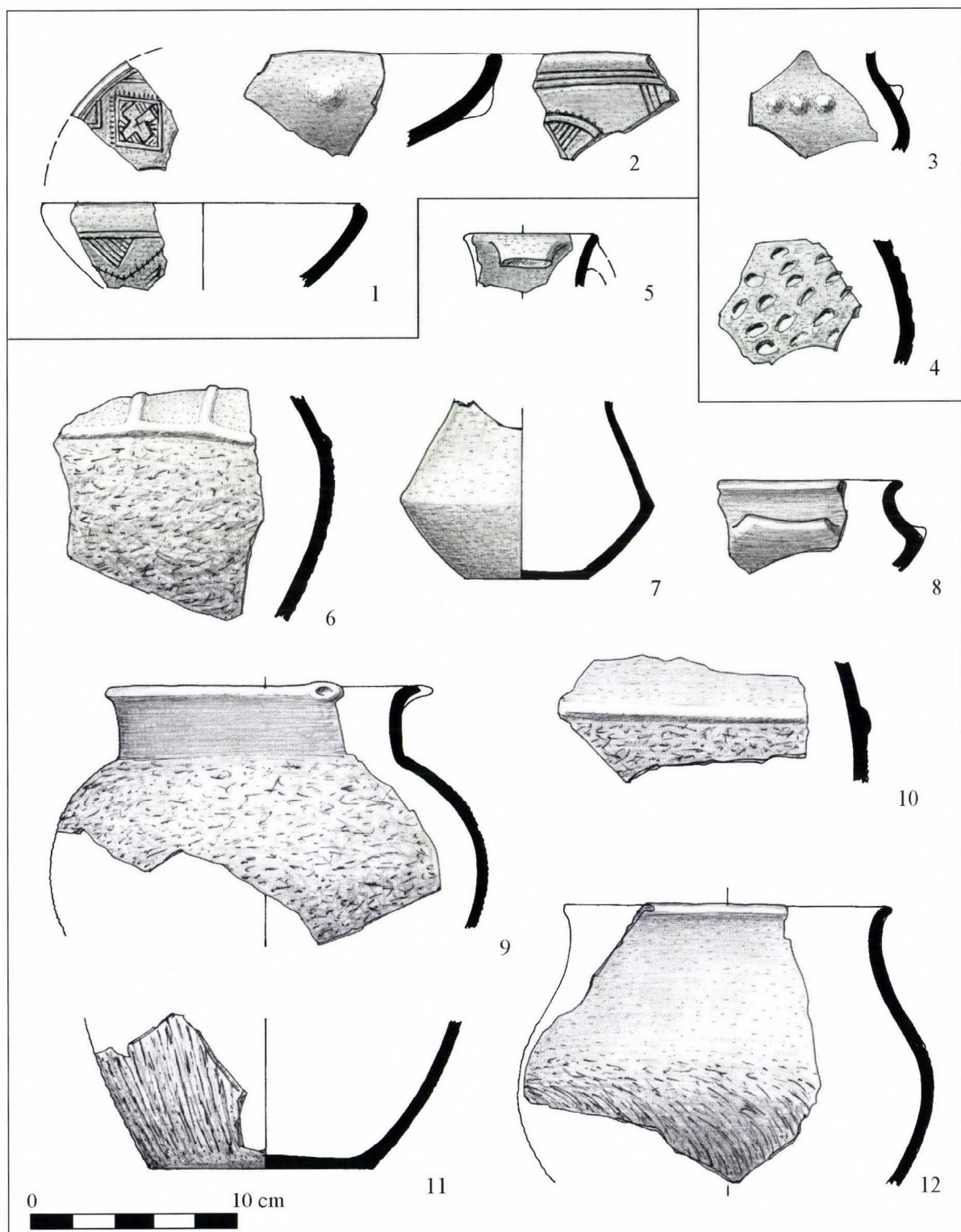
1-2. Trench DH-2-4/between -60 and -100 cm, 3. Trench DH-2-4/between -95 and -115 cm,  
 4. Trench K-3/unstratified find from Grave 43, 5. Trench K-6/between 50 and 80 cm,  
 6. Trench K-6/unstratified find, 7-9. Trench K-6/P/between -65 and -100 cm,  
 10-13. Trench K-6 and K-16/between -145 and -155 cm





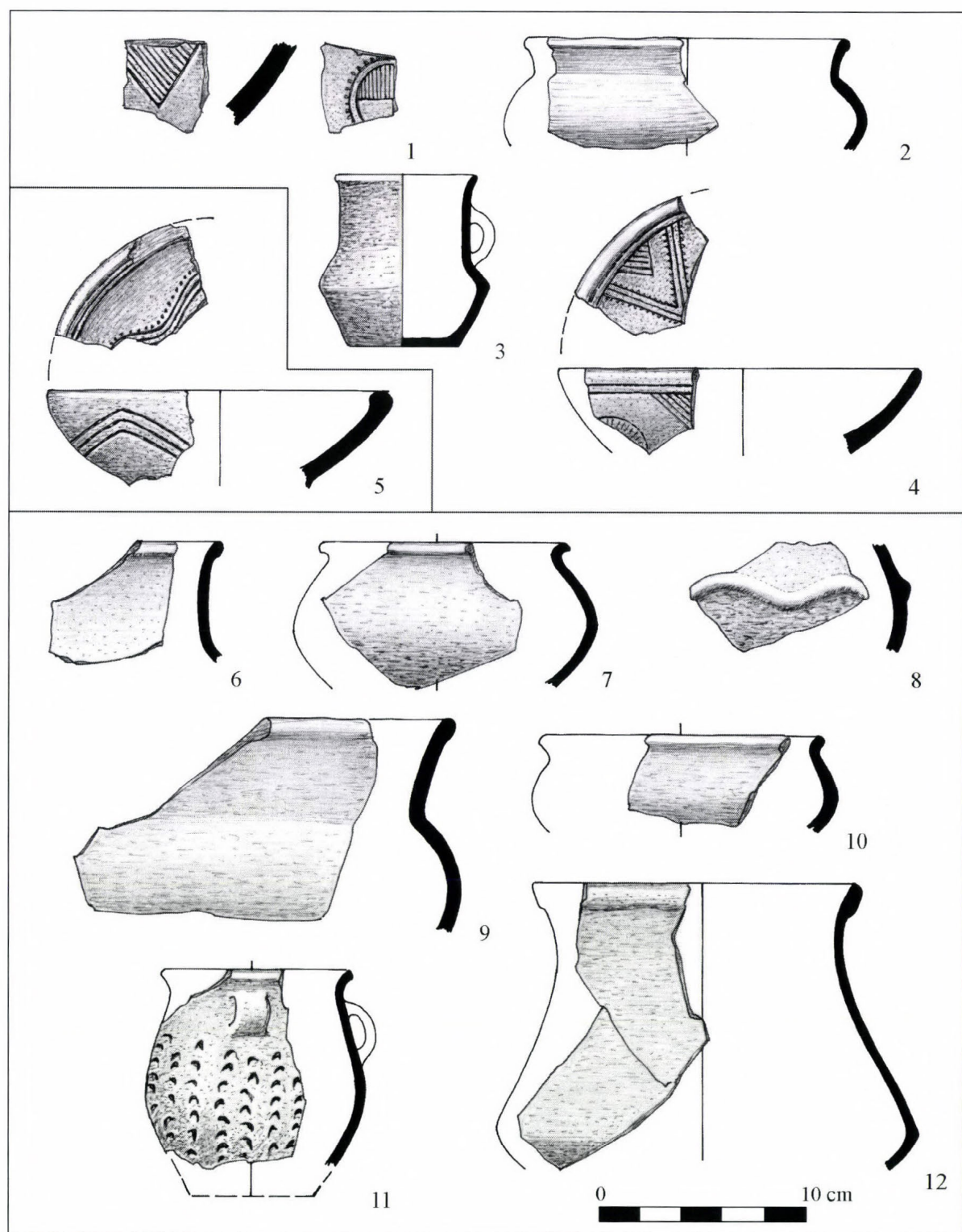
*Pl. 17. Somogyvár-Kupavárhegy*

1. Trench K-6 and K-6/P/unstratified find, 2. Trench K-8/between -100 and -150 cm,  
 3-4. Trench K-9/prehistoric pit, between -70 and -100 cm, 5. Trench K-11/A/between -60 and -100 cm,  
 6. Trench K-13/-98 cm, 7-8. Trench K-16/between -60 and -80 cm,  
 9-10. Trench K-16/between 40 and 60 cm, 11. Trench K-13/between -135 and -198 cm



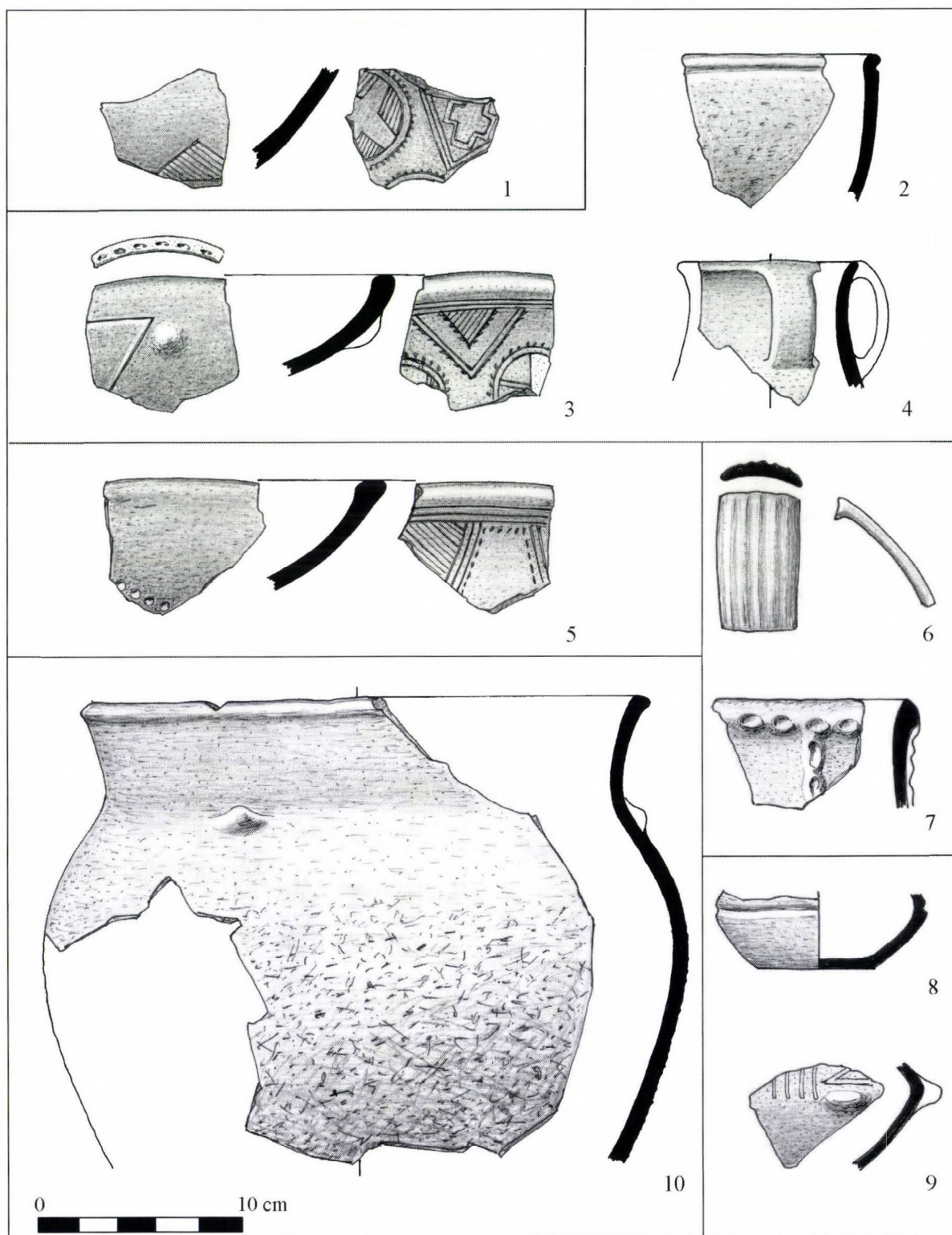
*Pl. 18. Somogyvár-Kupavárhegy*  
 1–2. Trench K–16/between -60 and -80 cm, 3–4. Trench K–16 and K–19/unstratified finds,  
 5–12. Trench K–17/between 80 and 20 cm





*Pl. 19. Somogyvár-Kupavárhegy*

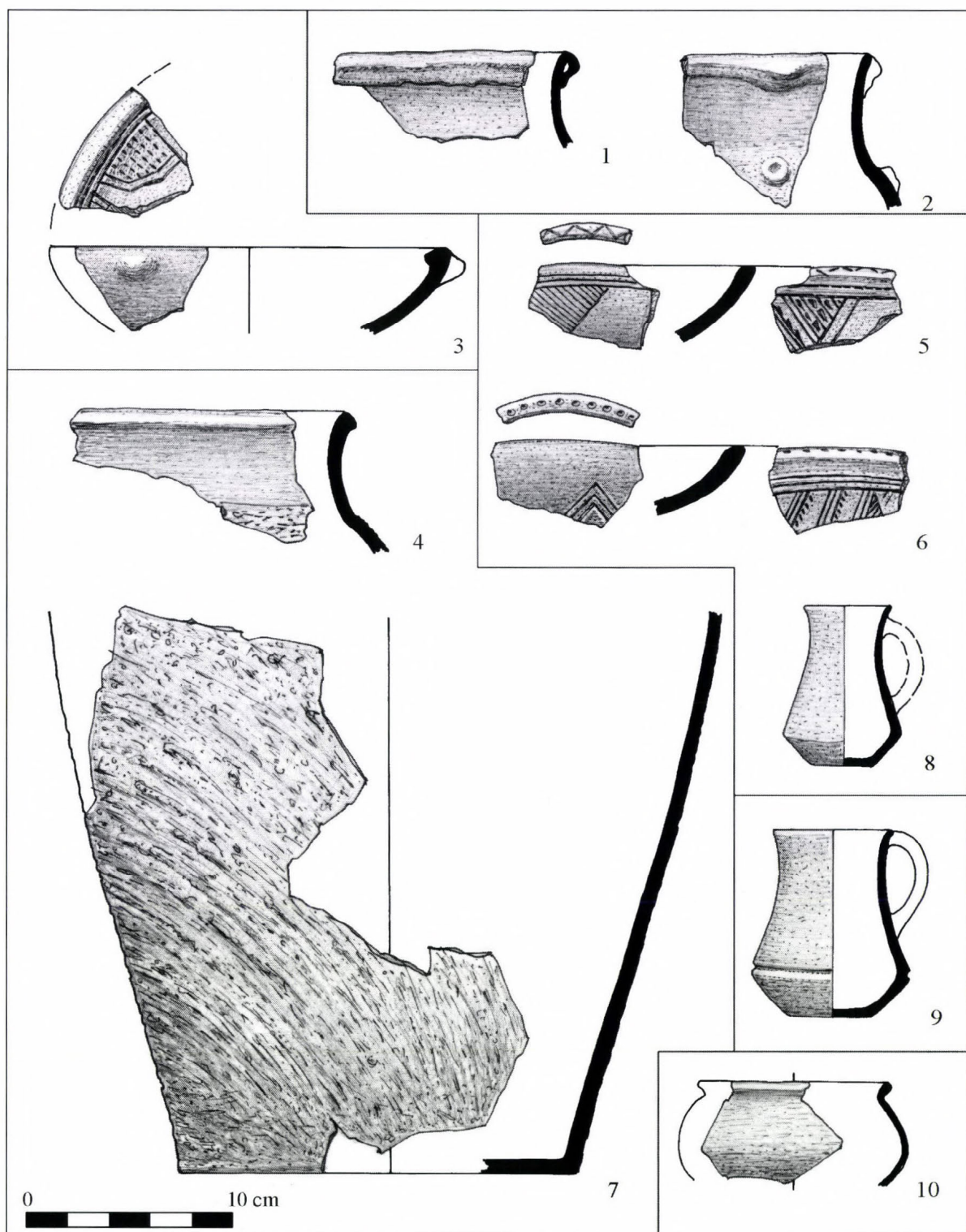
1–2. Trench K–19/between -30 and -55 cm, 3. Trench K–19/- 42 cm,  
 4. Trench K–19/between 40 and 60 cm, 5. Trench K–20/between -180 and -195 cm,  
 6–7. Trench K–22/between 20 and -10 cm, 8. Trench K–22/between 45 and -20 cm,  
 9–10. Trench K–22/between 65 and 45 cm, 11–12. Trench K–22/Pit B



*Pl. 20. Somogyvár-Kupavárhegy*

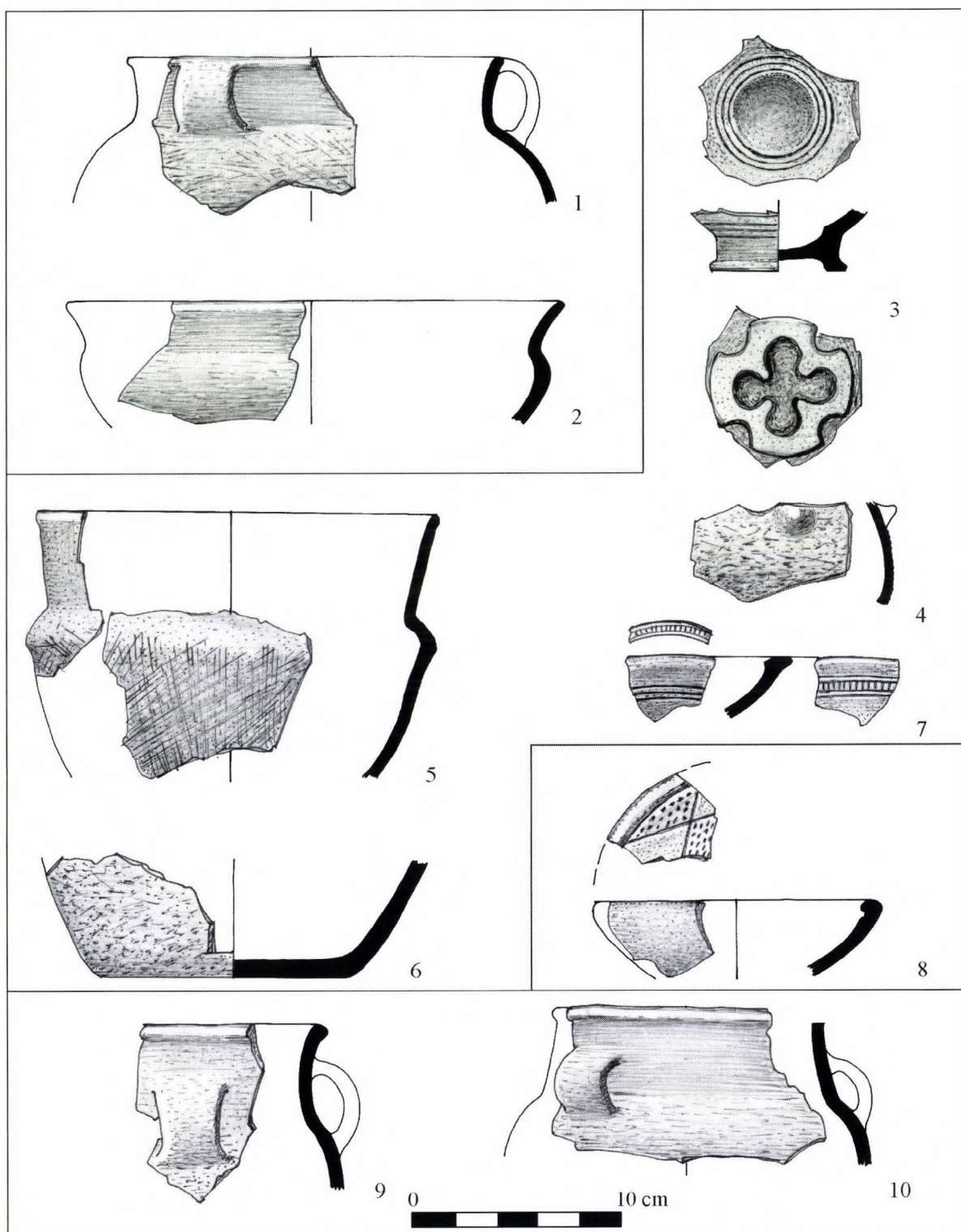
1. Trench K-21/between -140 and -205 cm, 2-4. Trench K-22/Pit C, -35 cm,  
 5. Trench K-23/between -20 and -40 cm, 6-7. Trench K-23/B/15 and -20 cm, 8. Trench K-22/Room 3 of the  
 medieval abbey, between 15 and 0 cm, 9. Trench K-22/Room 2 of the medieval abbey, between 15 and 0 cm,  
 10. Trench K-23/Pit under the entrance, between -70 and -100 cm





*Pl. 21. Somogyvár-Kupavárhegy*

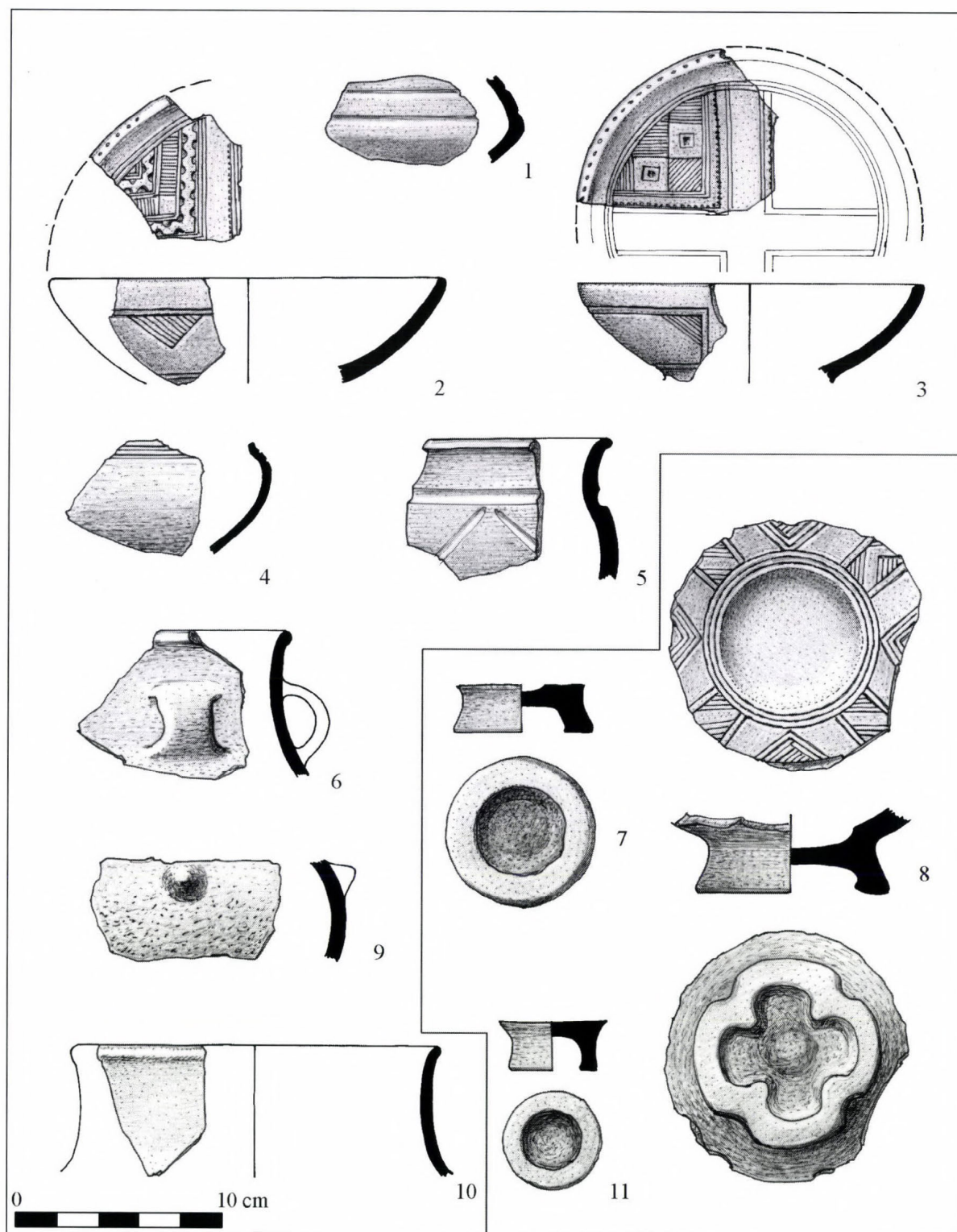
1–2, 4, 7. Trench K–23/Pit under the entrance, between -70 and -100 cm, 3. Trench K–23/B/15 and -20 cm,  
 5. Trench K–24/B/between 90 and 70 cm, 6, 8. Trench K–24/between 25 and 10 cm,  
 9. Trench K–23/-85 cm, 10. Trench K–24/between 90 and 75 cm



*Pl. 22. Somogyvár-Kupavárhegy*

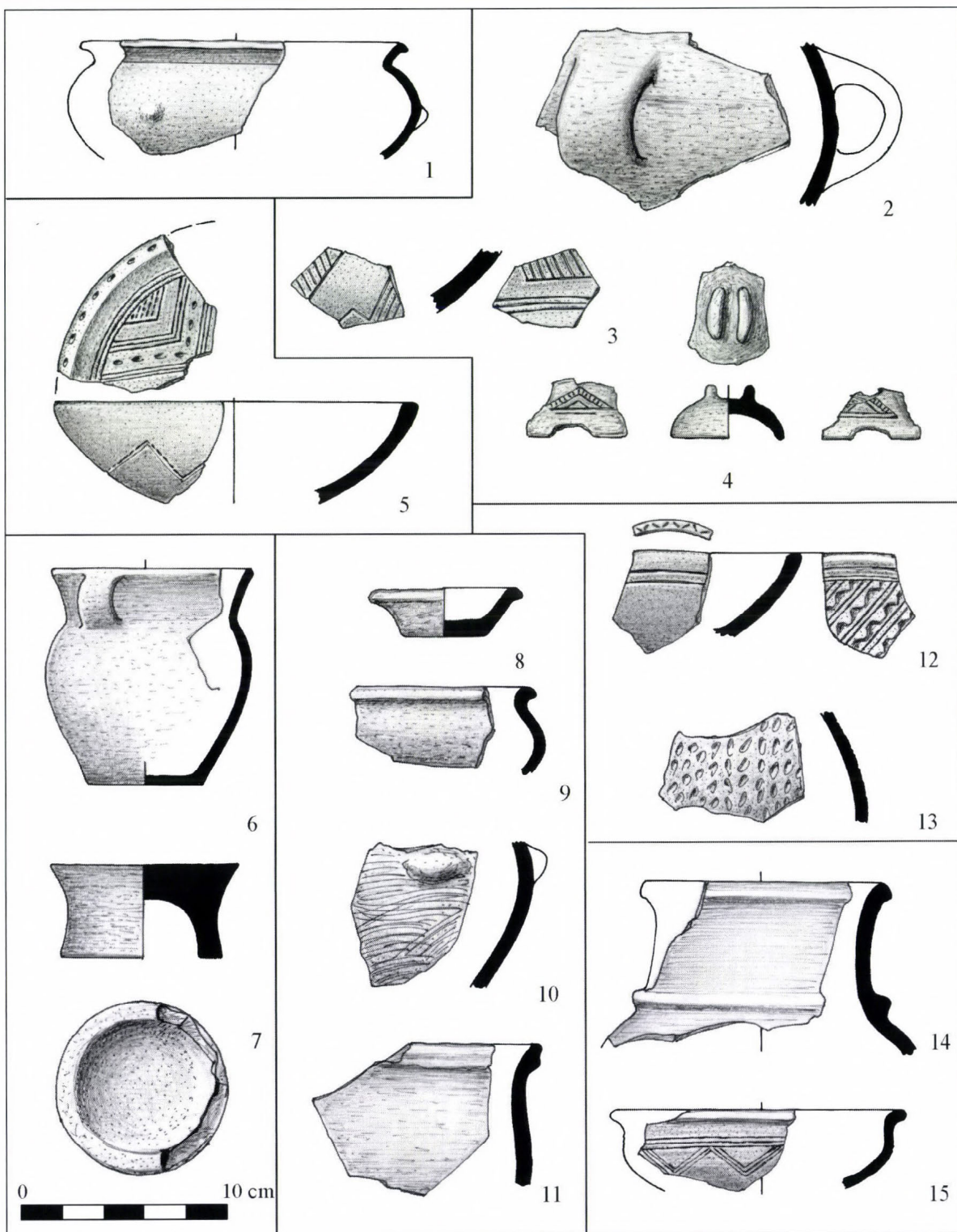
1–2. Trench K–23/between -35 and -70 cm, 3. Trench K–24/B/between 40 and 10 cm,  
4–6. Trench K–24/between 10 and -15 cm, 7. Trench K–24/B/between 50 and 10 cm,  
8. Trench P–3/between 95 and 70 cm, 9–10. Trench P–4/between 0 and -25 cm





*Pl. 23. Somogyvár-Kupavárhegy*

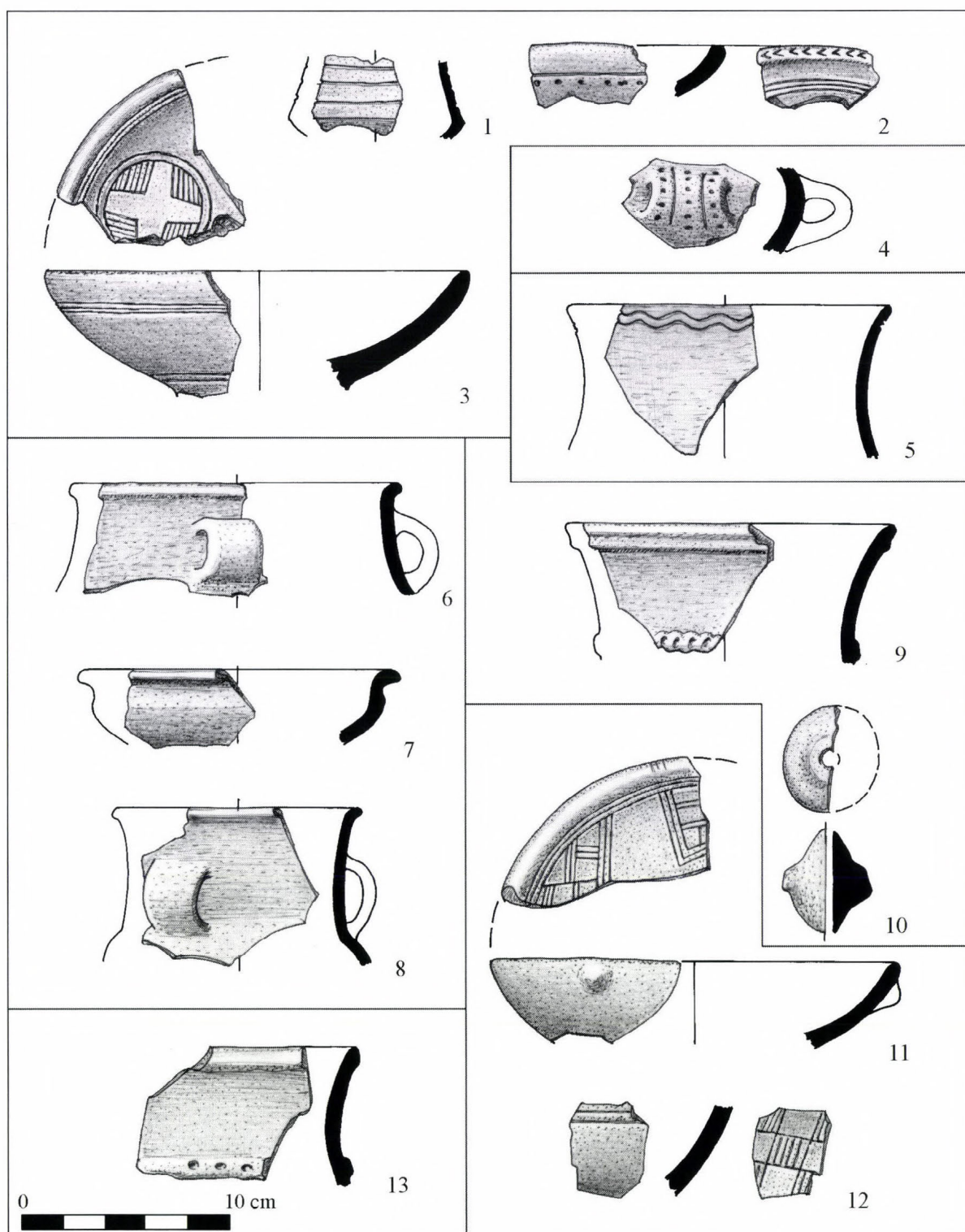
1, 4, 5. Trench P-4/between 15 and -20 cm, 2. Trench P-4/between -15 and -30 cm,  
3, 6, 9-10. Trench P-4/between -30 and -60 cm, 7-8, 11. Trench P-5/0 cm



*Pl. 24. Somogyvár-Kupavárhegy*

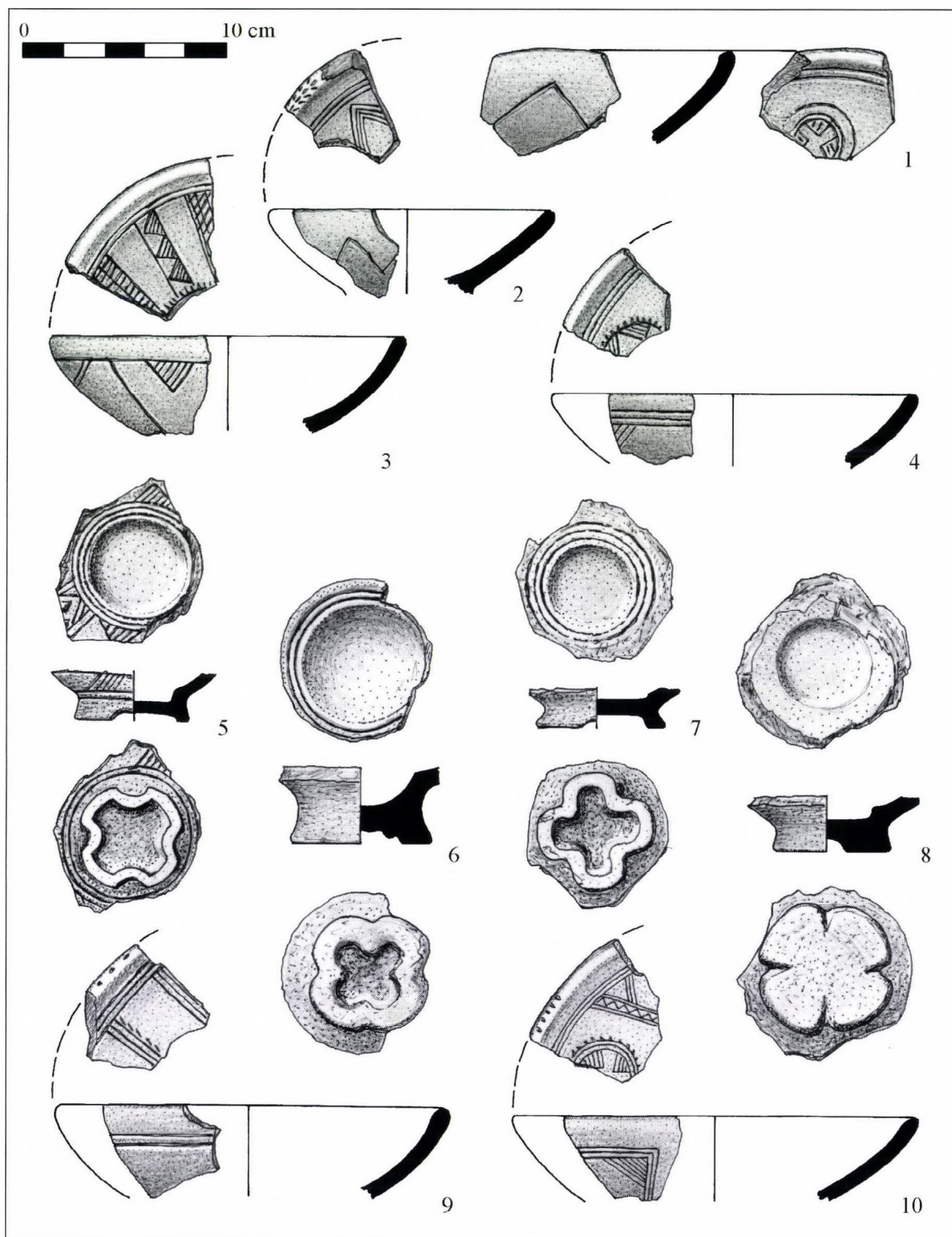
1. Trench P-5/-30 cm, 2-4. Trench P-5/between 15 and -20 cm, 5. Trench P-4/between 15 and -20 cm,  
6-7. Trench P-5/A/unstratified finds from Grave 402, 8-11. Trench P-5/between 110 and 0 cm,  
12-13. Trench P-5/between 25 and 0 cm, 14-15. Trench P-7/ between -100 and -130 cm





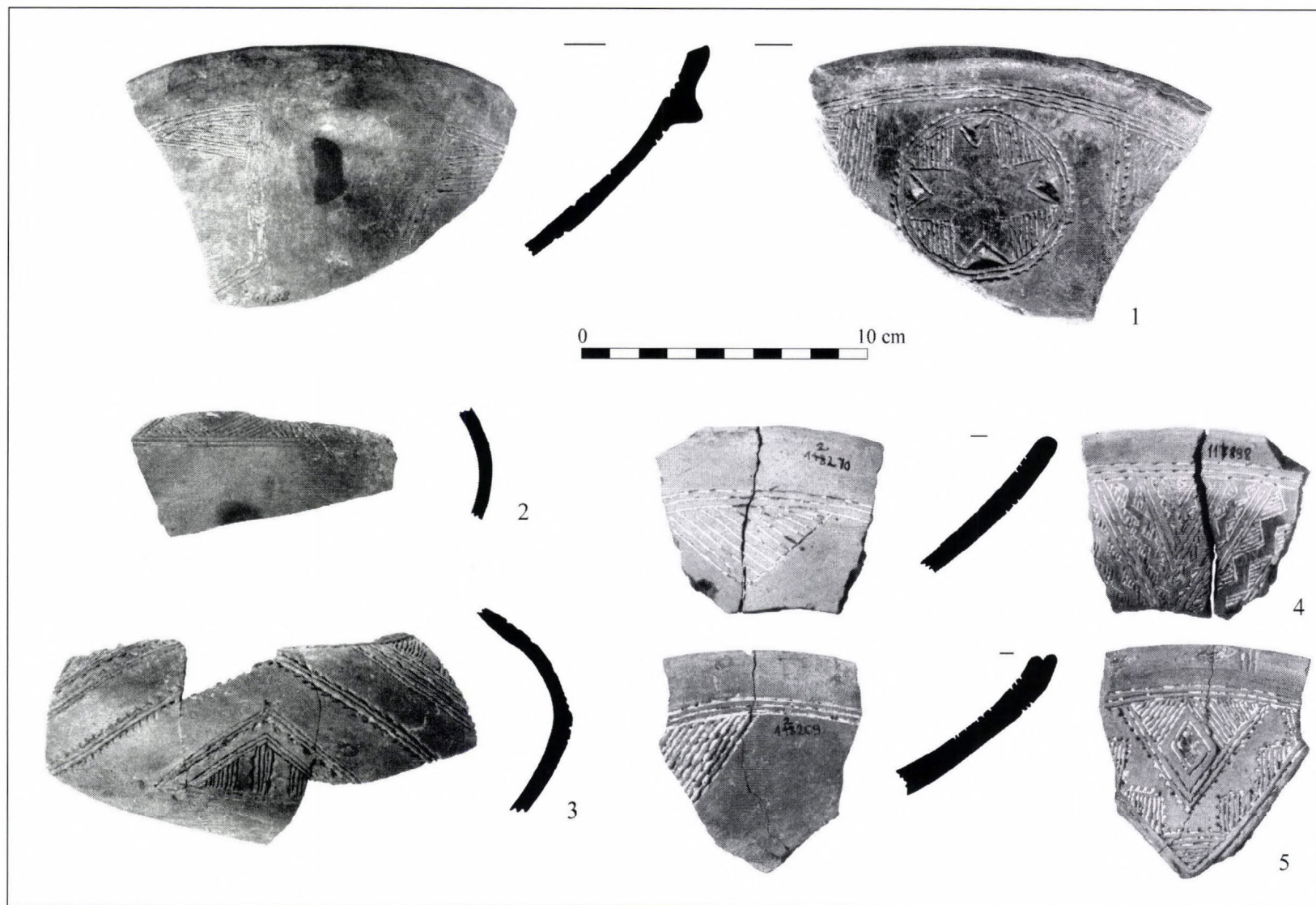
*Pl. 25. Somogyvár-Kupavárhegy*

1–3. Trench P–6/between 40 and 0 cm, 4. Trench P–6/between 95 and 65 cm,  
 5. Trench P–7/between -45 and -60 cm, 6–8. Trench P–7/between -110 and -130 cm,  
 9–10. Trench P–8/between -135 and -160 cm, 11–12. Trench P–17/between -160 and -230 cm,  
 13. Trench P–17/between -230 and -245 cm

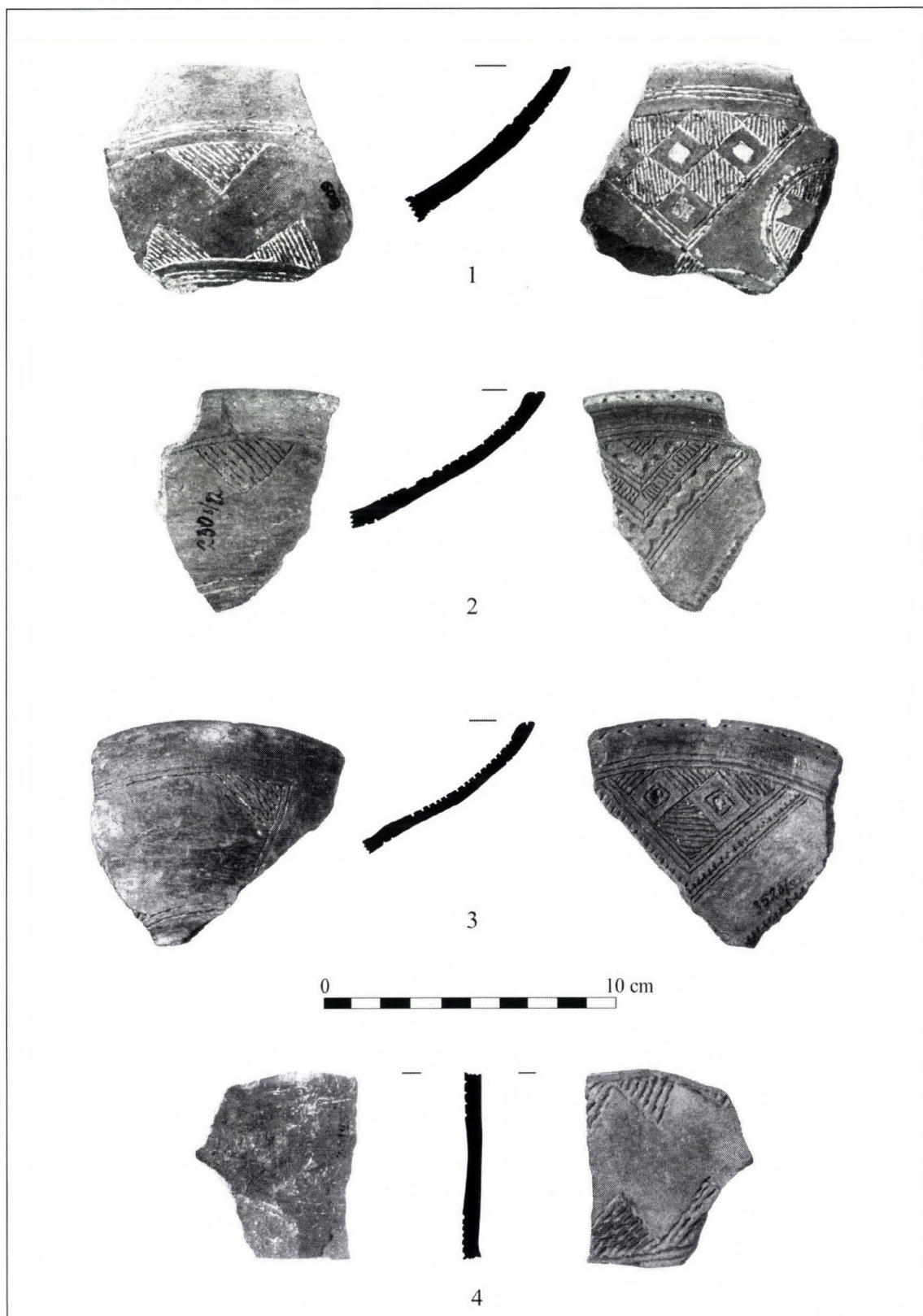


*Pl. 26. Somogyvár-Kupavárhegy*  
1–10. Selection of the unstratified finds from Kornél Bakay's excavations (1972–1987)



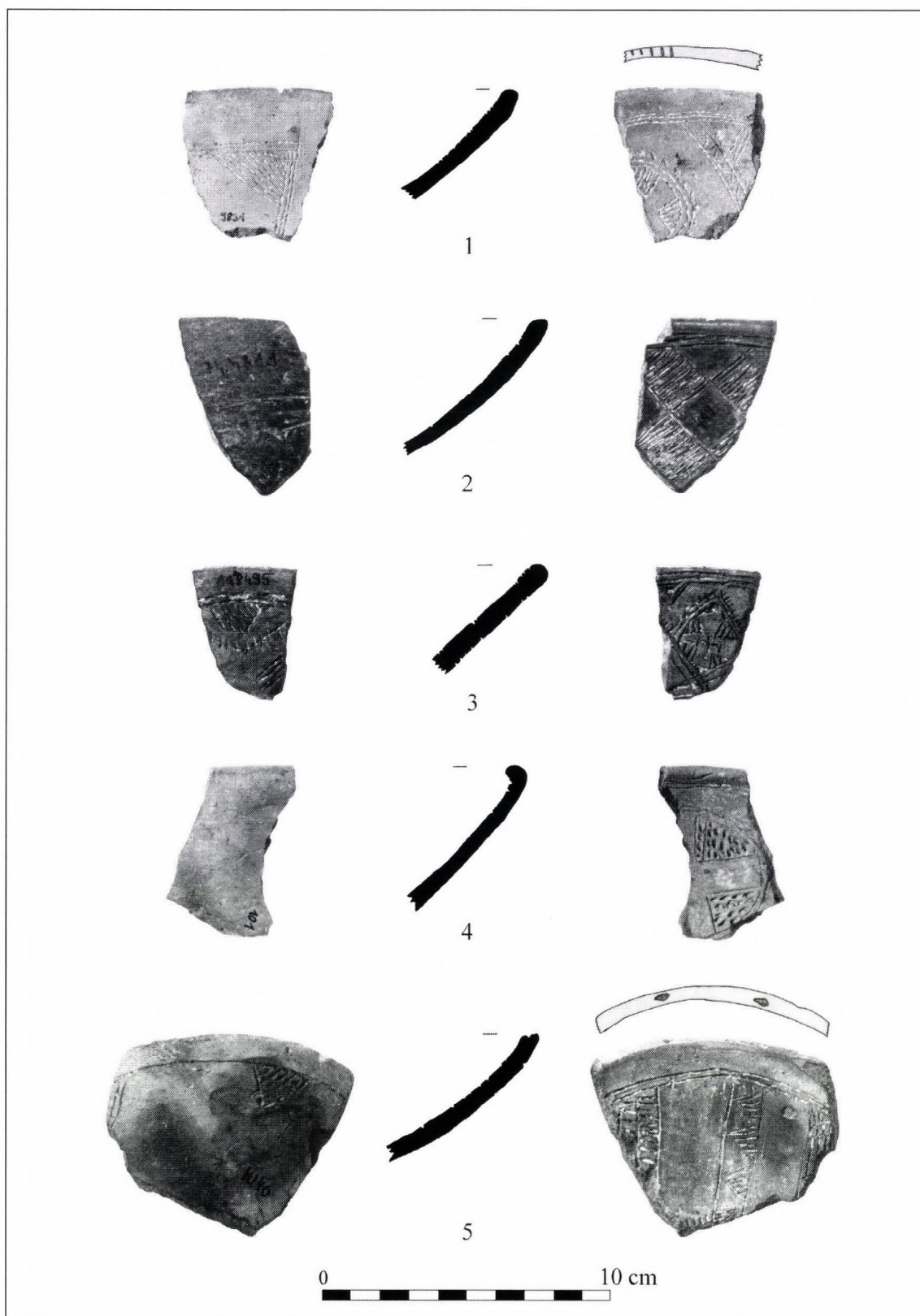


Pl. 27. Somogyvár–Kupavárhegy  
1–3. Trench XXV/K/unstratified finds, 4–5. Trench Du/unstratified finds



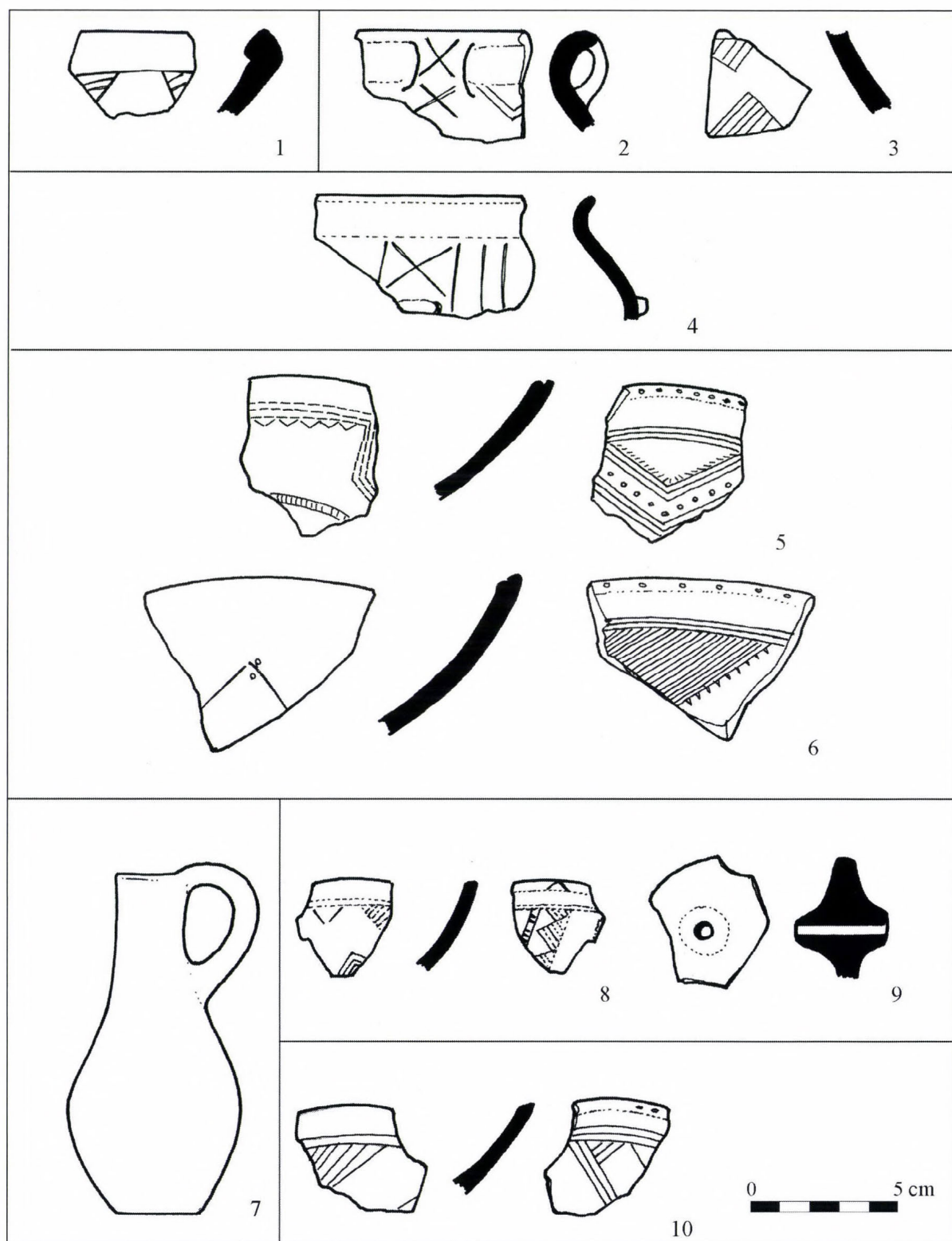
*Pl. 28. Somogyvár-Kupavárhegy*  
 1. Trench K-11/A/between -60 and -100 cm, 2. Trench P-4/between -15 and -30 cm,  
 3. Trench P-4/between -30 and -60 cm,  
 4. selection of the unstratified finds from Kornél Bakay's excavations (1972-1987)





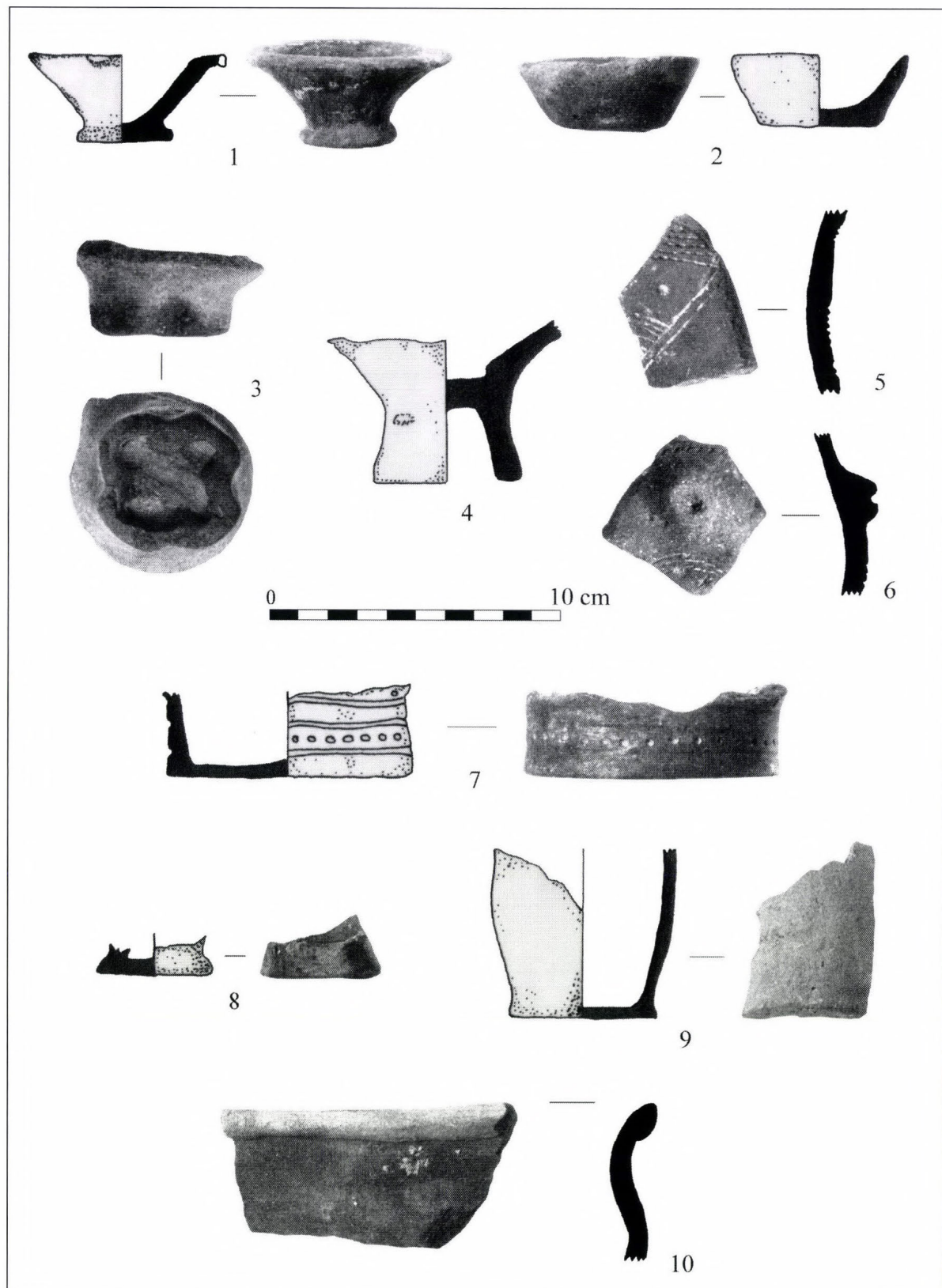
*Pl. 29. Somogyvár-Kupavárhegy*

- 1, 5. Selection of the unstratified finds from Kornél Bakay's excavations (1972–1987),  
 2. Trench ÉH-4/between 149 and 105 cm, 3. Trench K-16/between -60 and -80 cm,  
 4. Trench DH-2-3/between -100 and -120 cm

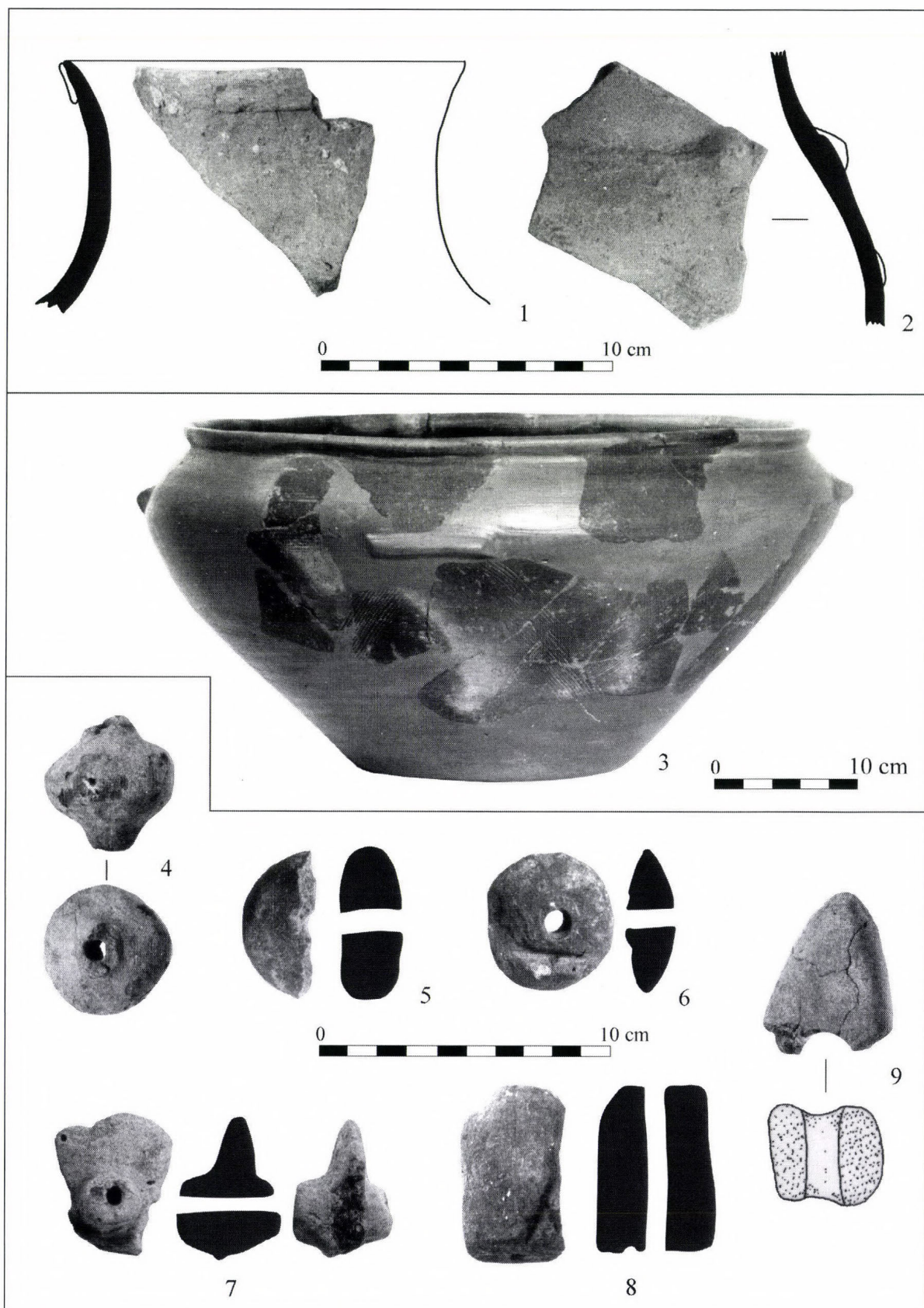


Pl. 30. Early Bronze Age finds from southern Transdanubia, County Somogy  
 1. Bonnya–Pogánydomb (SV cat. no. 34), 2–3. Csoma (SV cat. no. 41),  
 4. Kaposvár–Site 16, Keceli-hegy (SV cat. no. 96), 5–6. Toponár (SV cat. no. 233),  
 7. Karád (SV cat. no. 101), 8–9. Somogyzsitfa–Földvár (SV cat. no. 200),  
 10. Somogyzsitfa–Szöcsénypuszta (SV cat. no. 201)



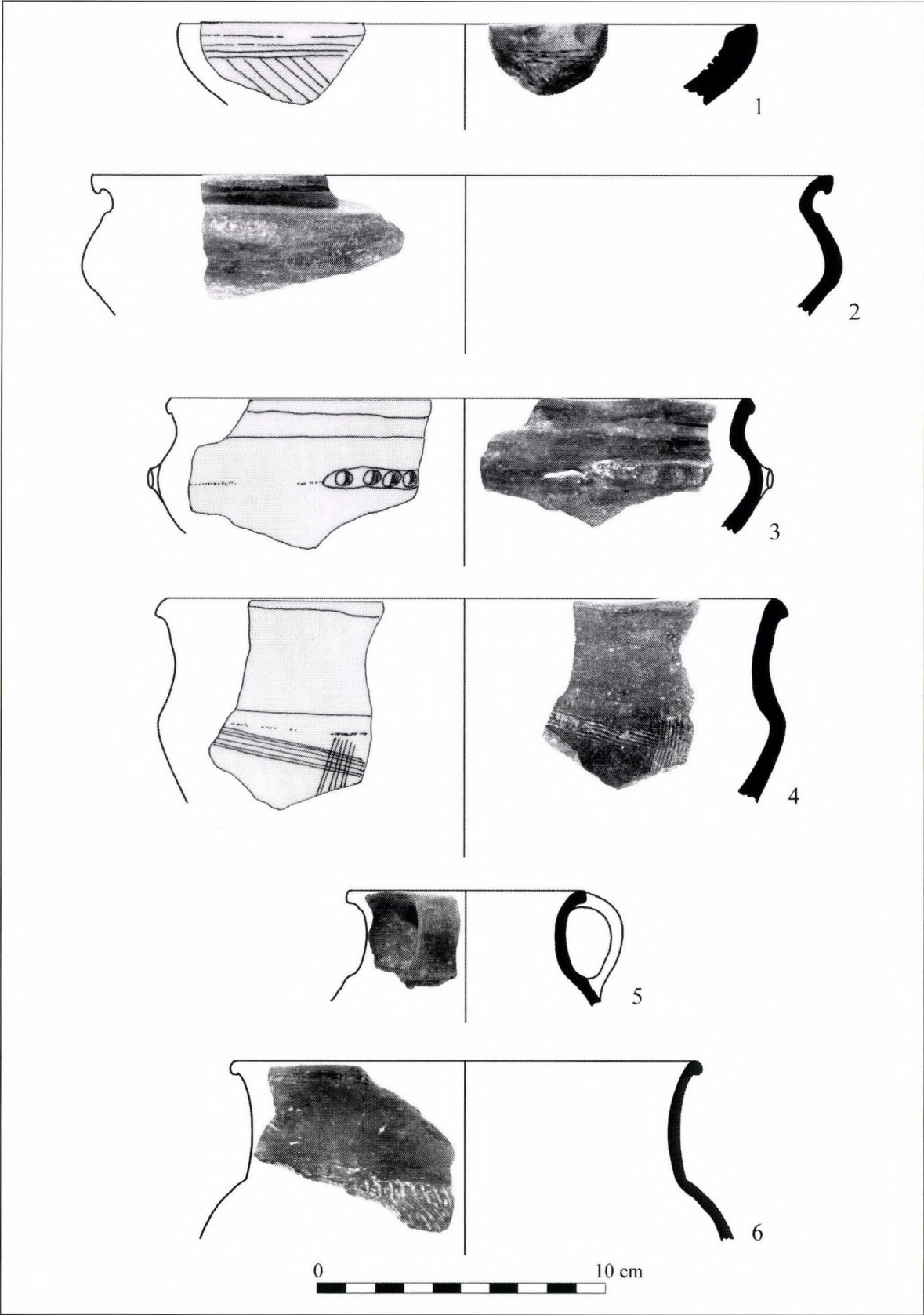


*Pl. 31. Early Bronze Age finds from southern Transdanubia, County Somogy  
1–10. Polány (SV cat. no. 173)*

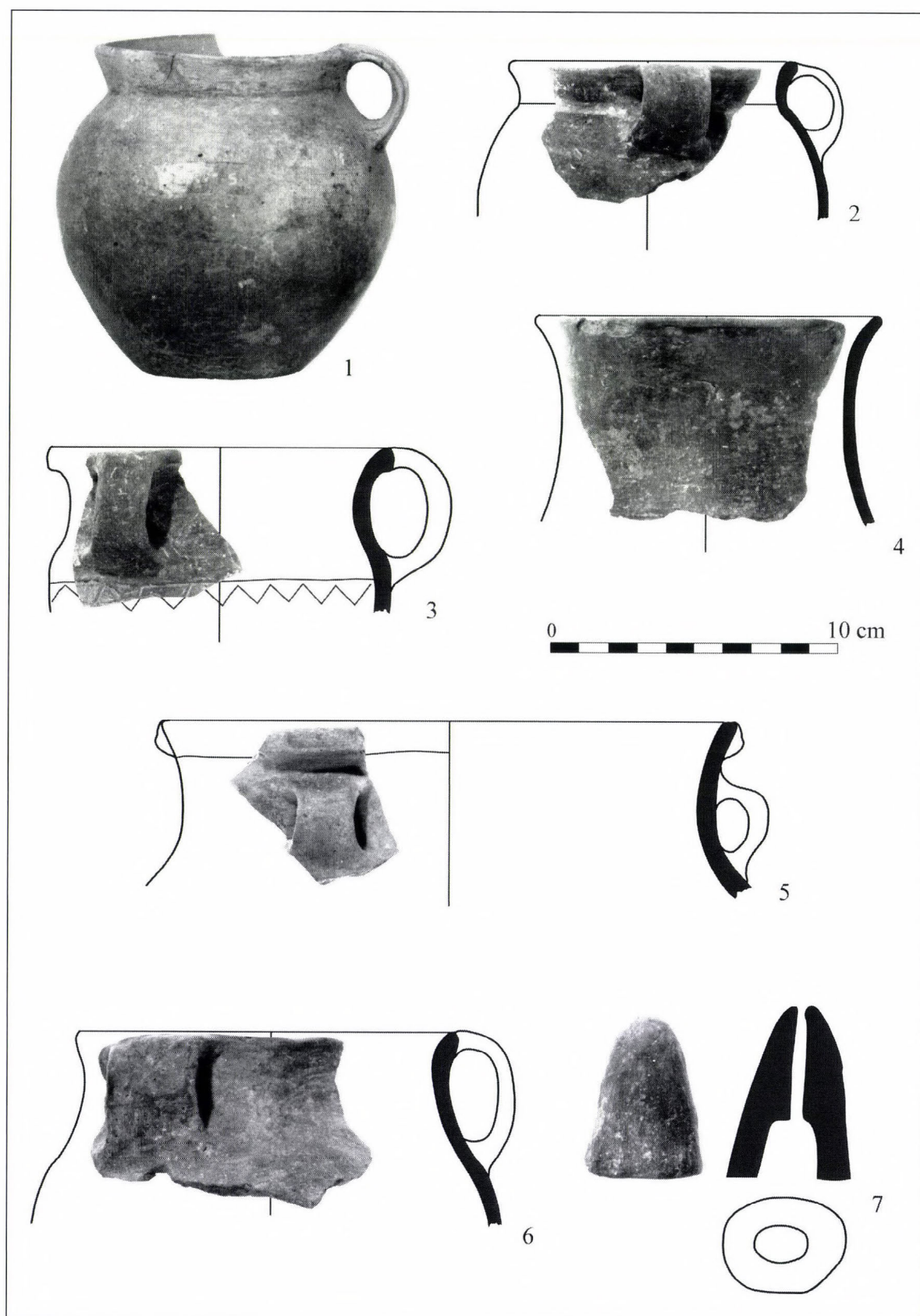


Pl. 32. Early Bronze Age finds from southern Transdanubia, County Somogy  
1–9. Polány (SV cat. no. 173)



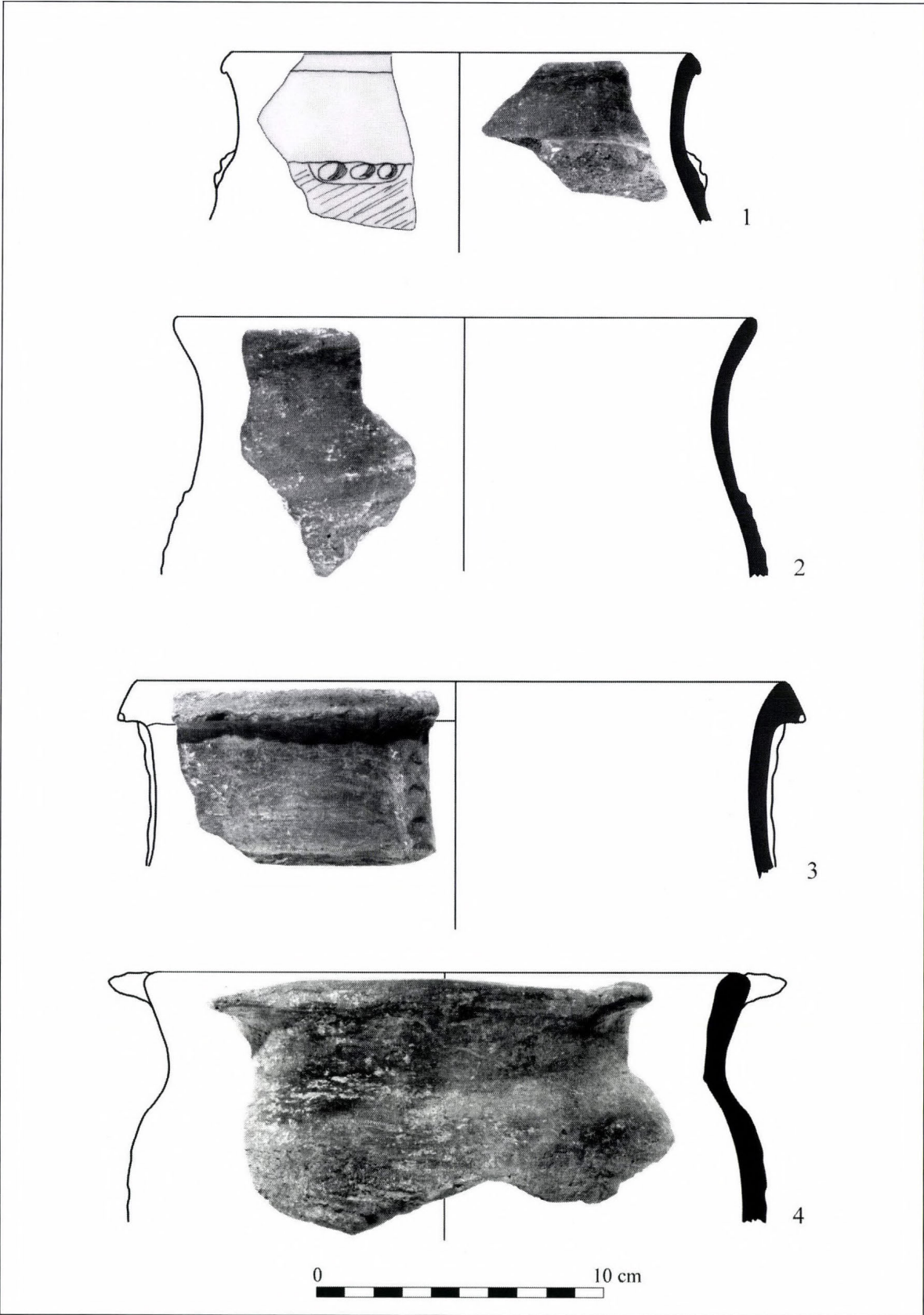


Pl. 33. Early Bronze Age finds from southern Transdanubia, County Somogy  
1–6. Kánya (SV cat. no. 103)



*Pl. 34. Early Bronze Age finds from southern Transdanubia, County Somogy  
1–7. Kánya (SV cat. no. 103)*



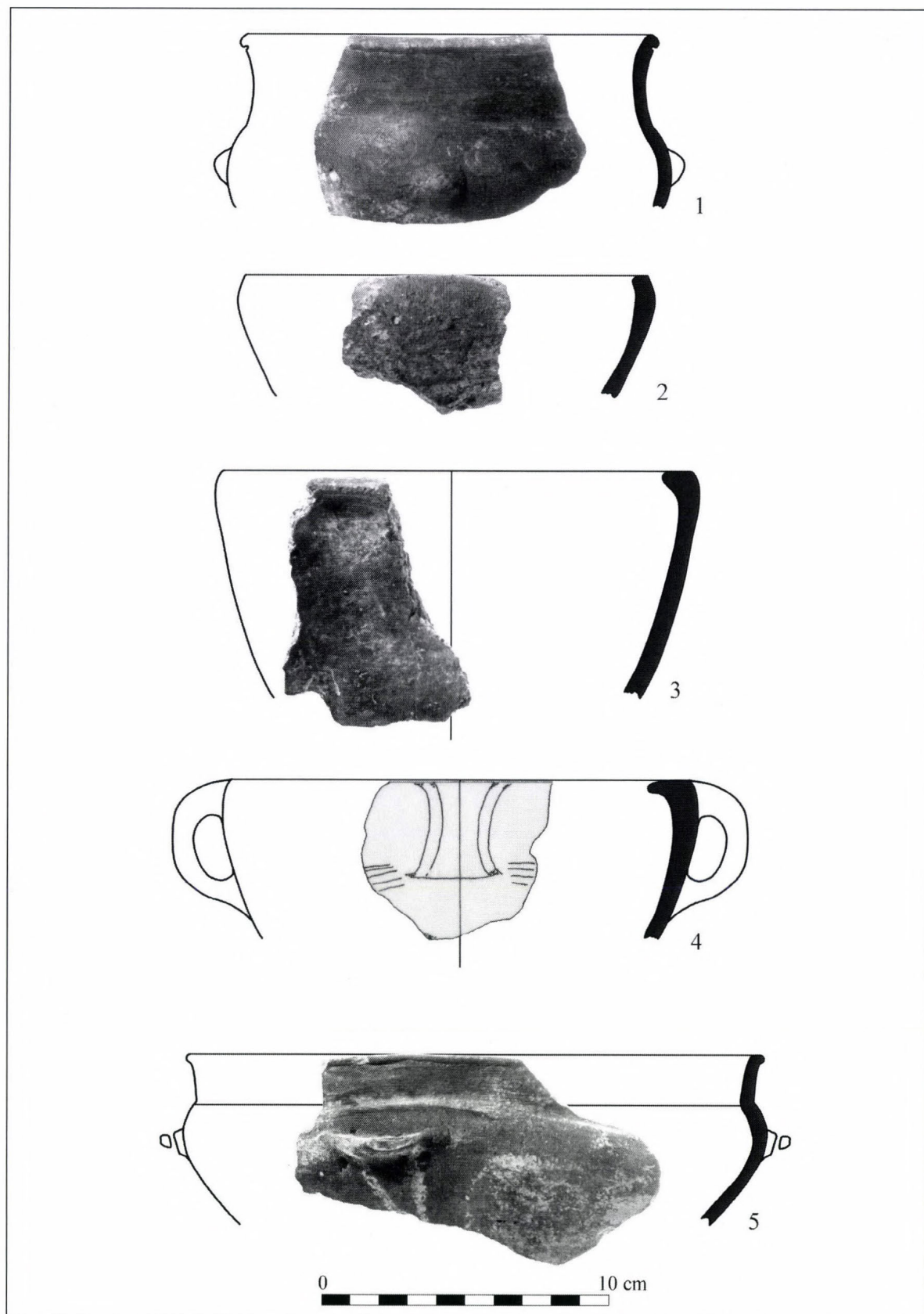


Pl. 35. Early Bronze Age finds from southern Transdanubia, County Somogy  
1–4. Kánya (SV cat. no. 103)

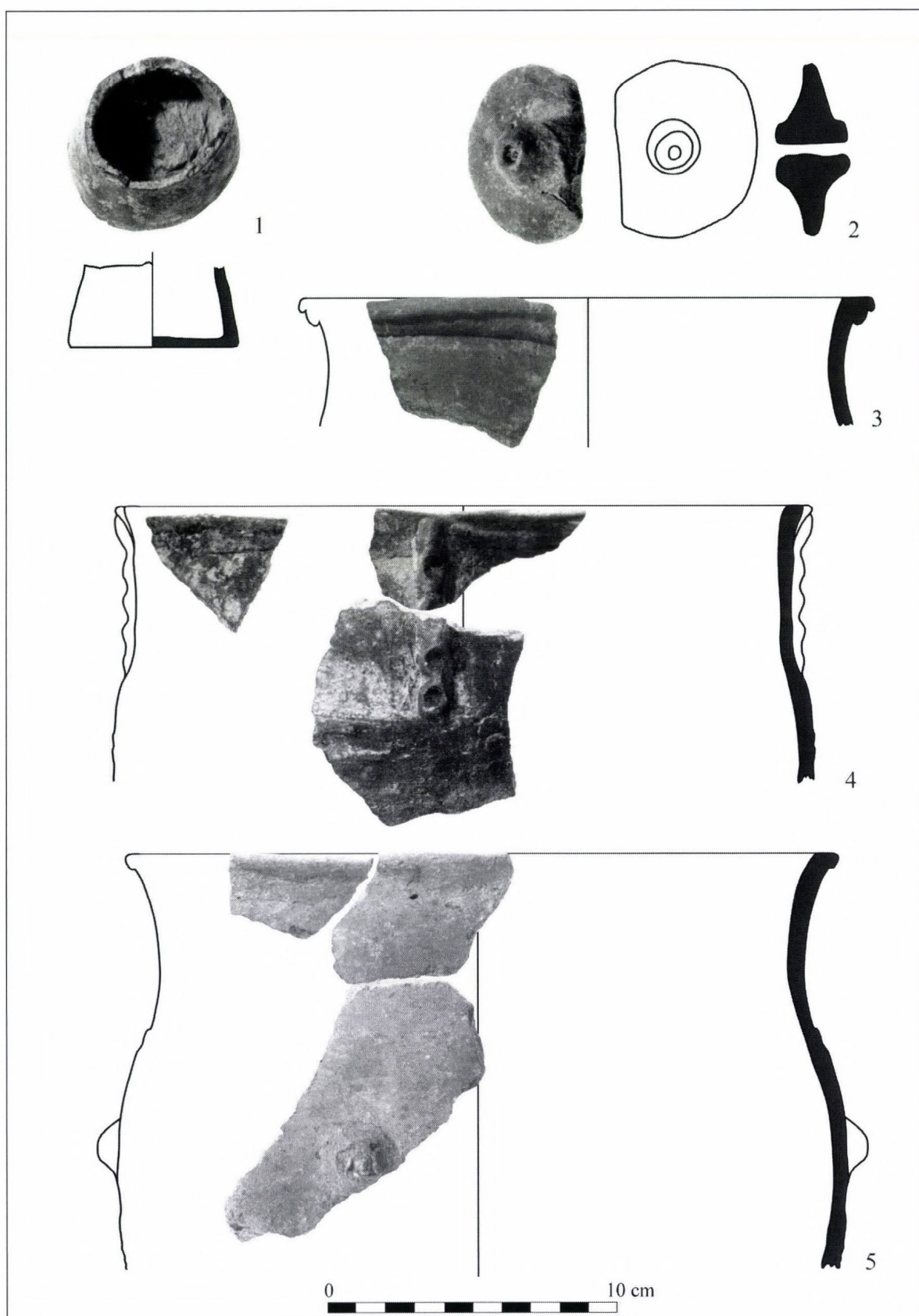


*Pl. 36.* Early Bronze Age finds from southern Transdanubia, County Zala  
1–3. Letenye–Szentkeresztomb (SV cat. no. 125)



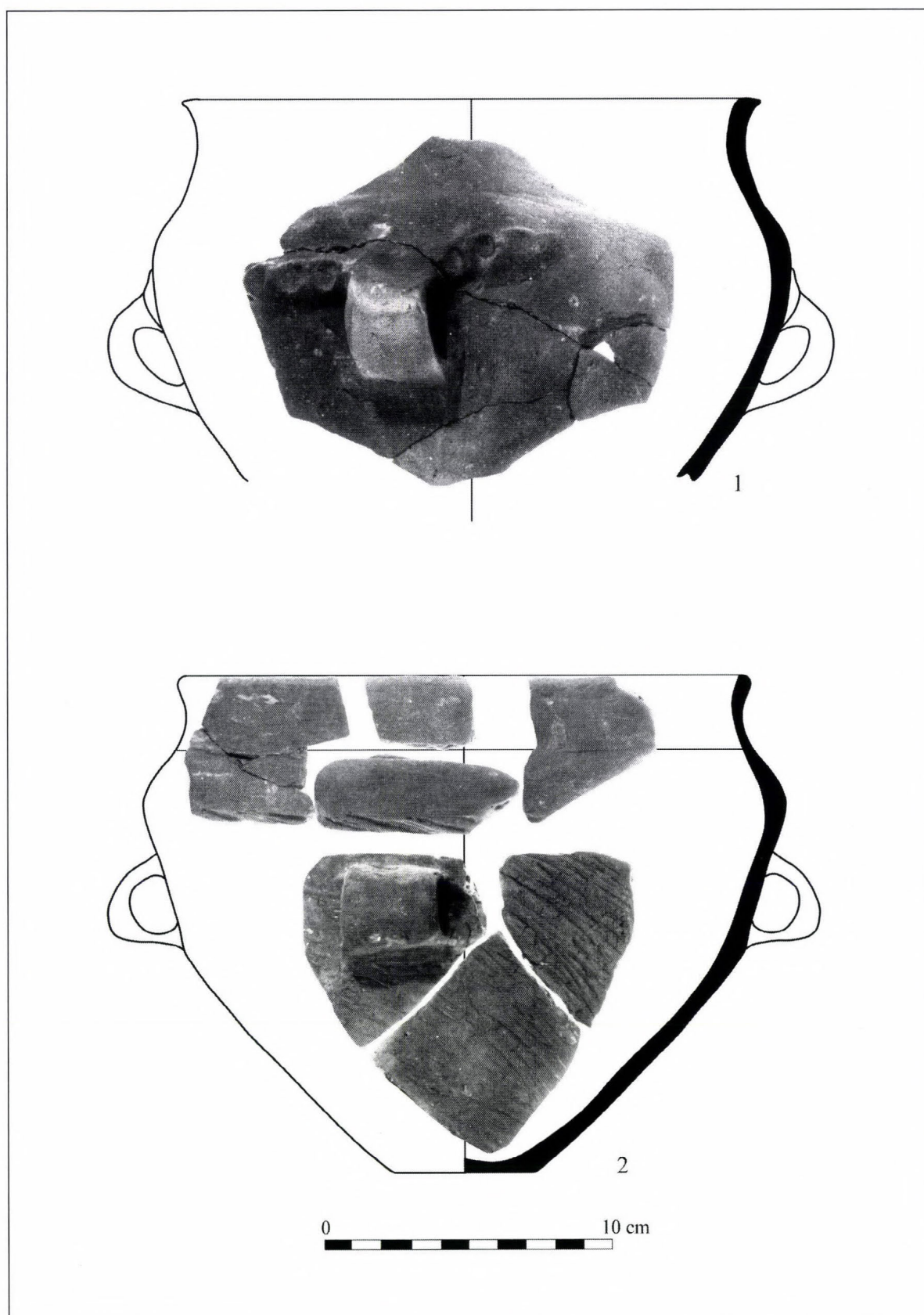


Pl. 37. Early Bronze Age finds from southern Transdanubia, County Zala  
1–5. Letenye–Szentkeresztomb (SV cat. no. 125)

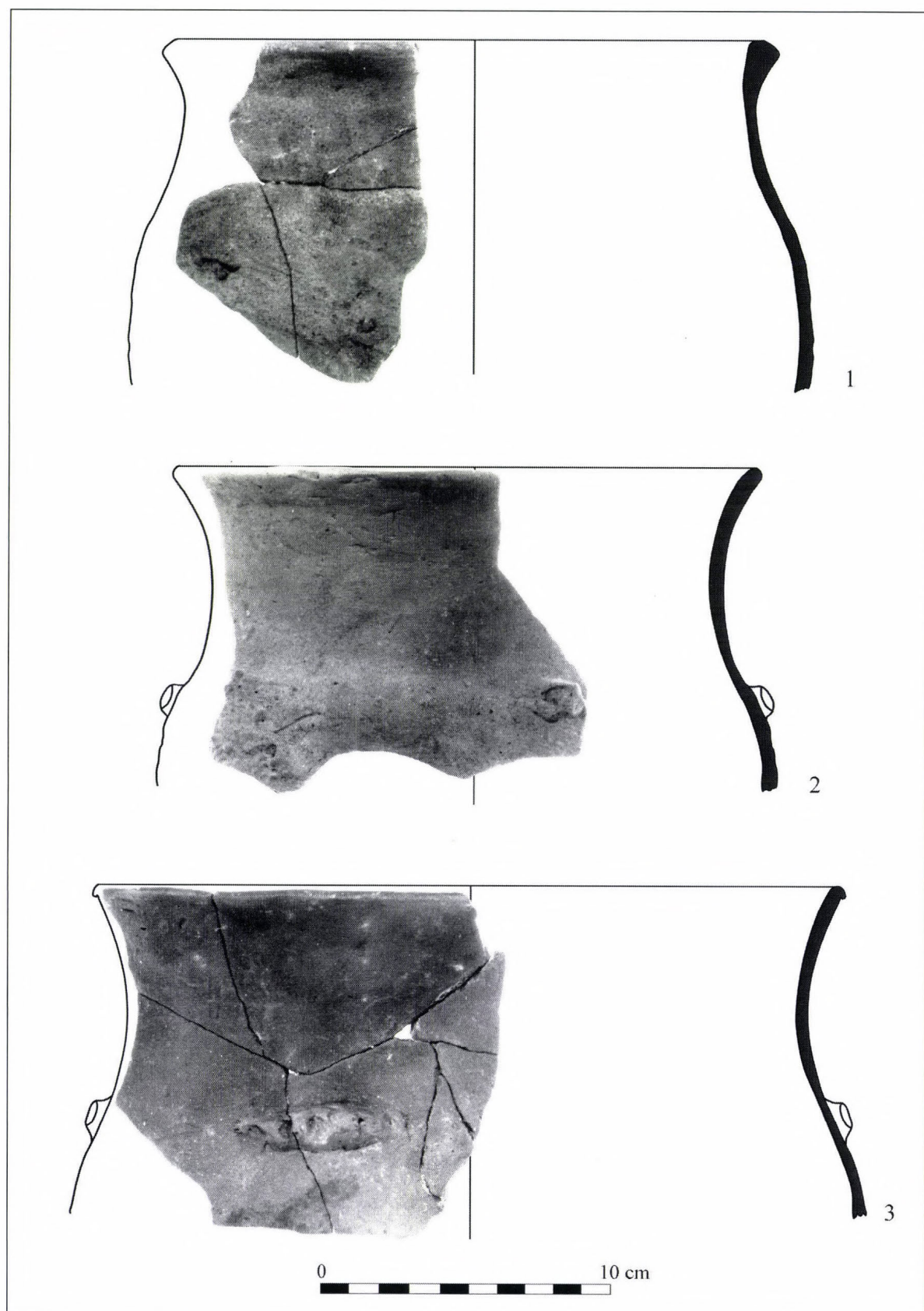


Pl. 38. Early Bronze Age finds from southern Transdanubia, County Zala  
1–5. Letenye-Szentkeresztomb (SV cat. no. 125)





*Pl. 39.* Early Bronze Age finds from southern Transdanubia, County Zala  
1–2. Nagykanizsa–Sánc (SV cat. no. 144)

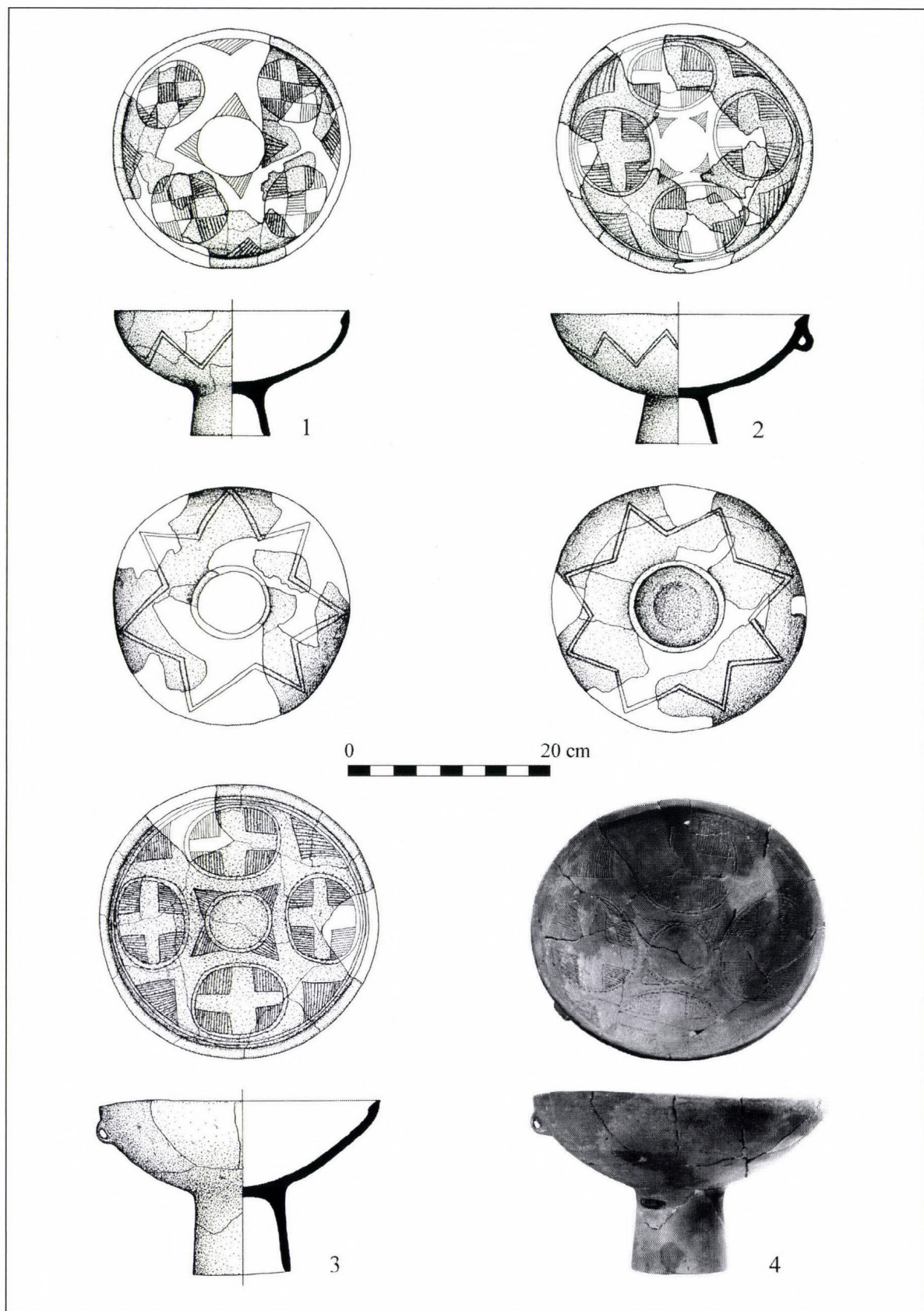


Pl. 40. Early Bronze Age finds from southern Transdanubia, County Zala  
1-3. Nagykanizsa-Sánc (SV cat. no. 144)



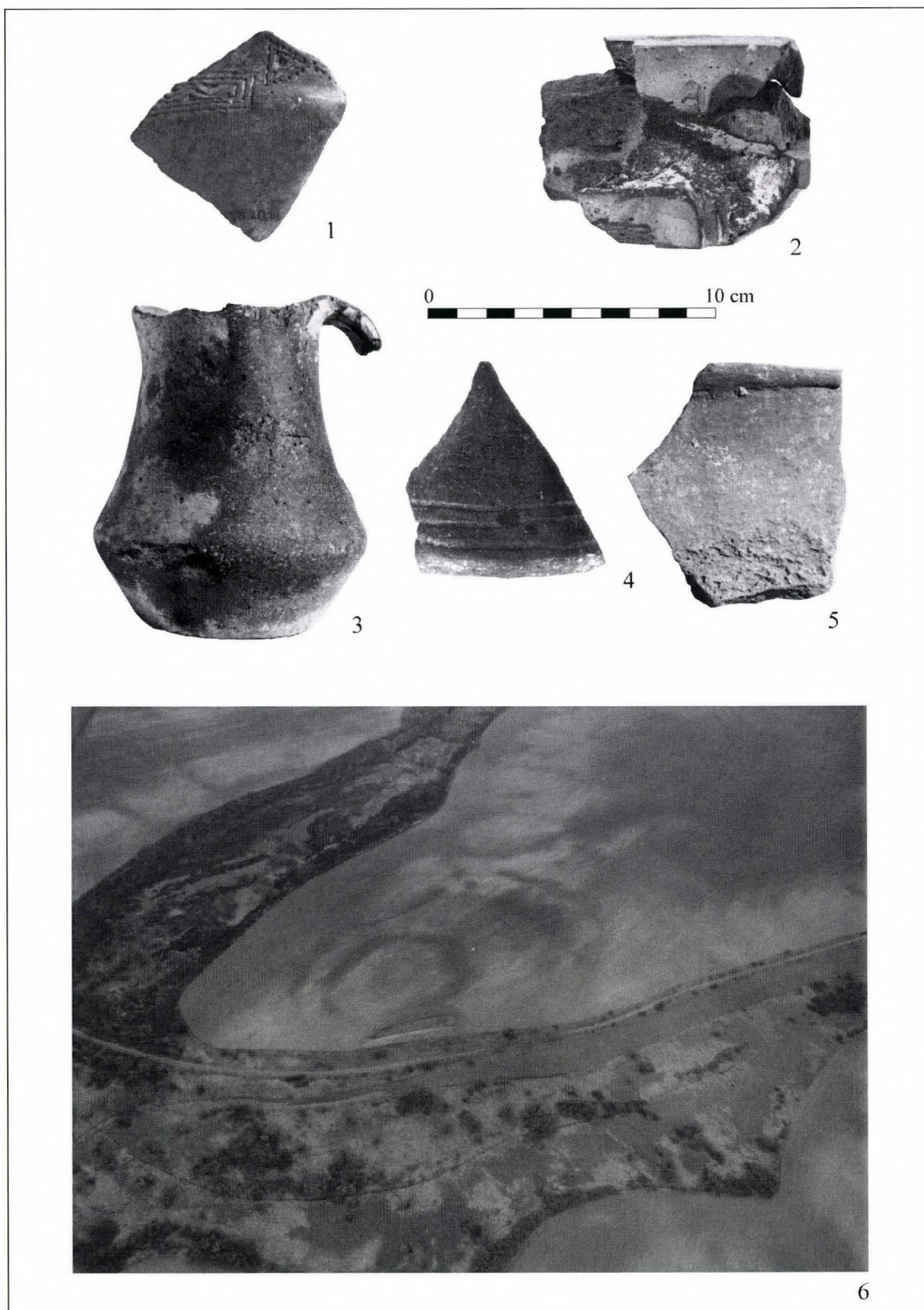


*Pl. 41.* Early Bronze Age finds from southern Transdanubia, County Zala  
1–5. Nagykanizsa–Sánc (SV cat. no. 144)



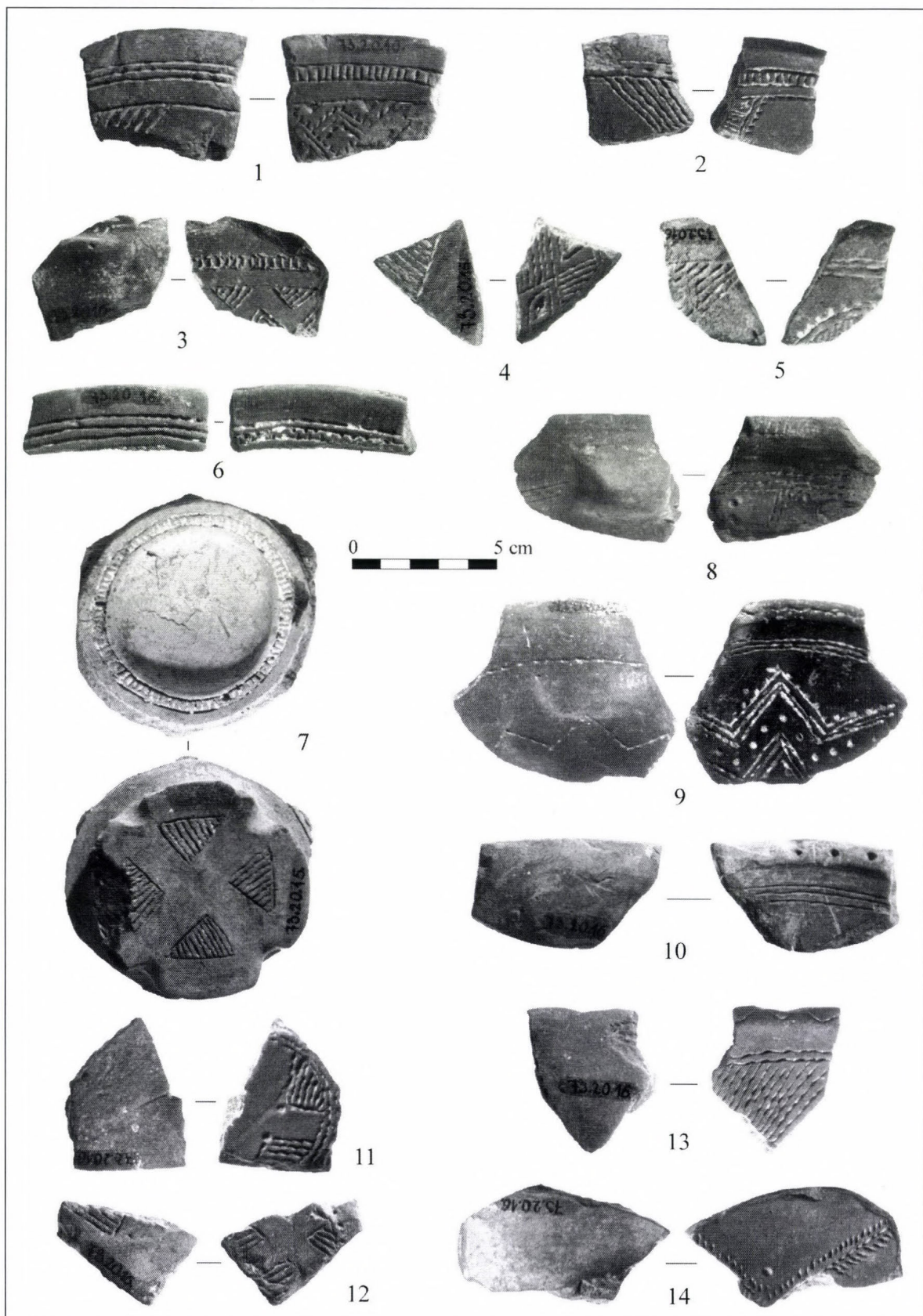
Pl. 42. Early Bronze Age finds from southern Transdanubia, County Tolna  
1–4. Dombóvár (SV cat. no. 44)





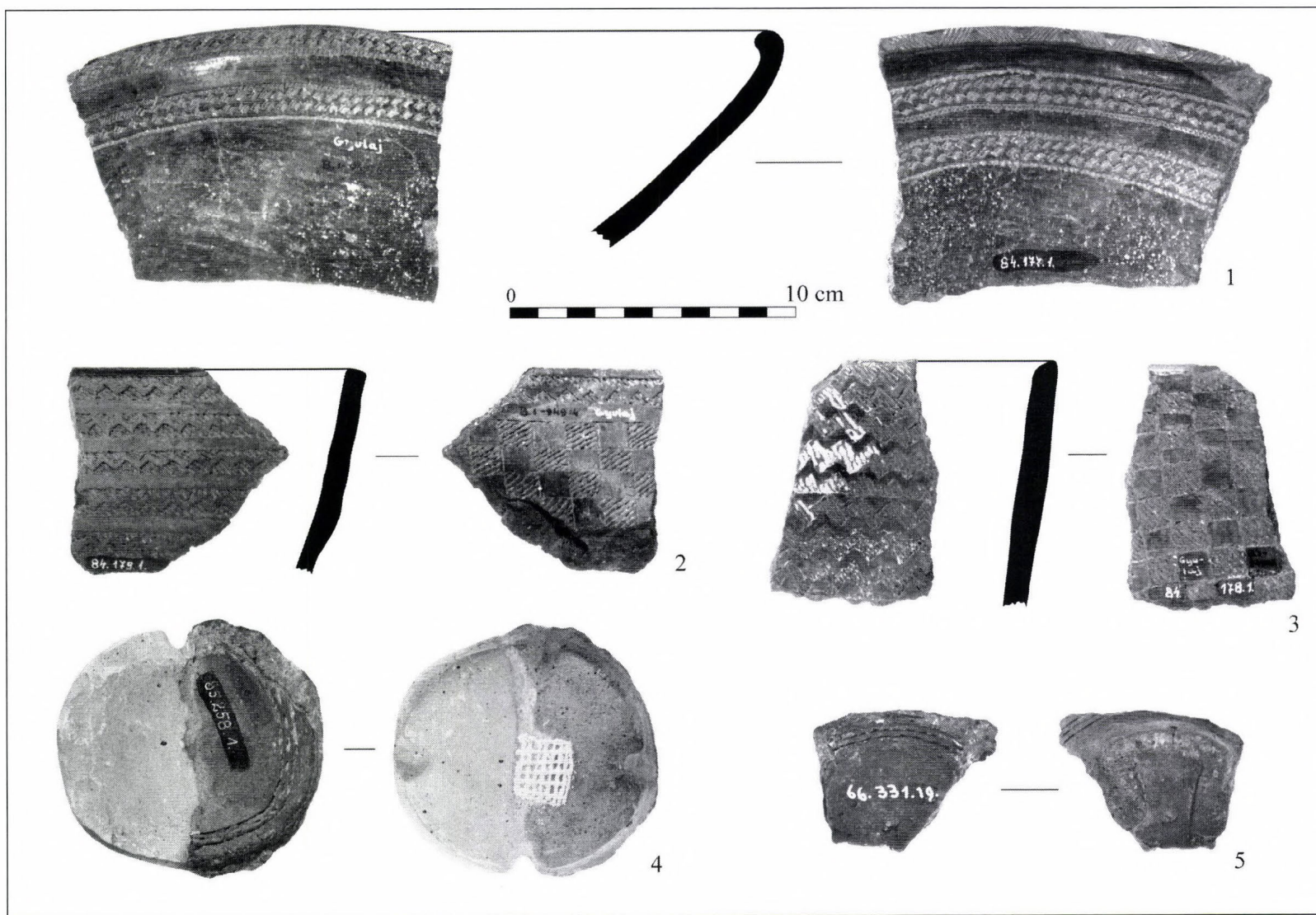
*Pl. 43.* Early Bronze Age finds from southern Transdanubia, County Tolna  
 1–2, 4–5. Döbrököz–Tűzköves (SV cat. no. 49), 3. Döbrököz–TSZ silógödör (SV cat. no. 50),  
 6. Döbrököz–Tűzköves (photo by Zsuzsa Miklós)



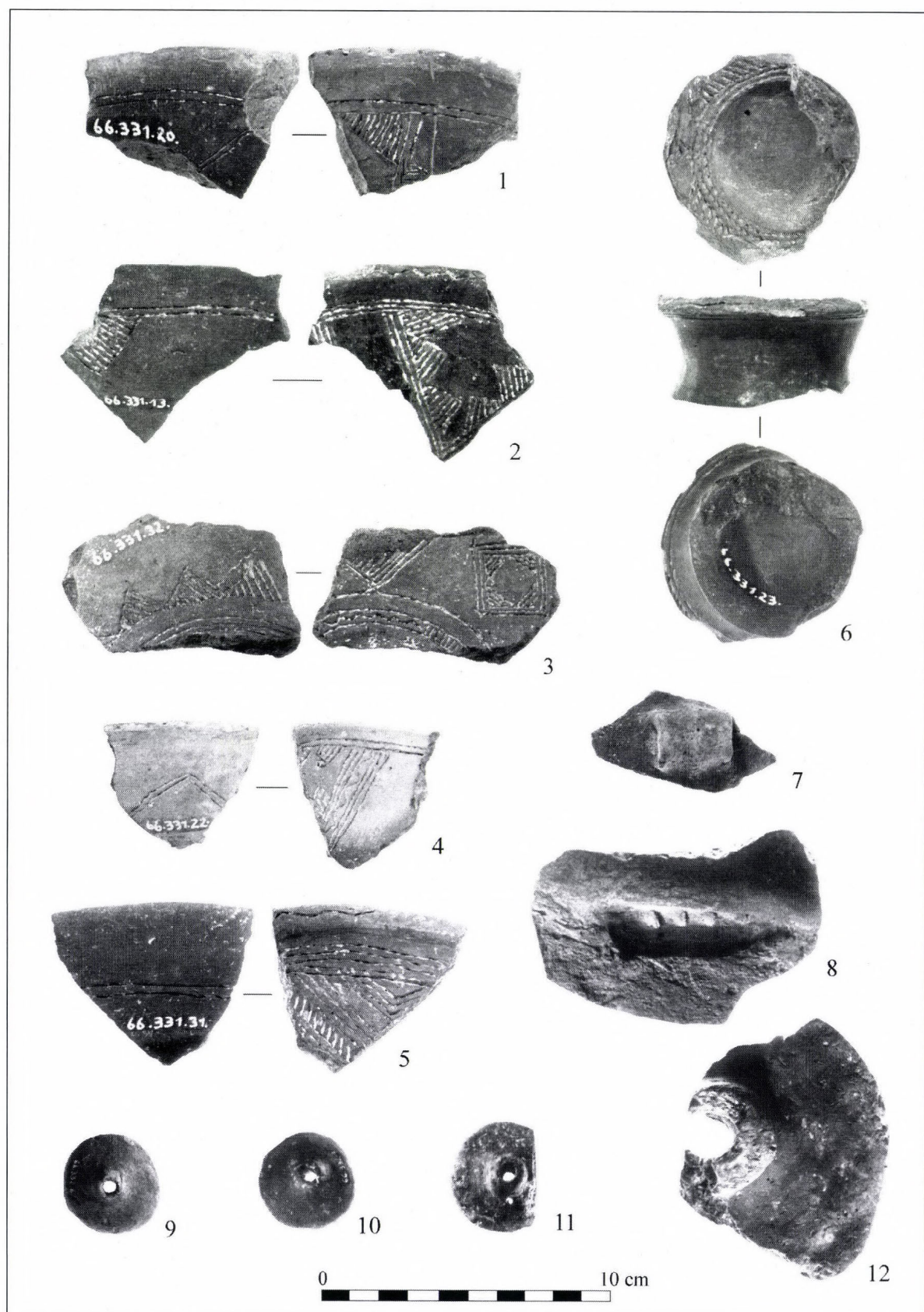


Pl. 44. Early Bronze Age finds from southern Transdanubia, County Tolna  
1–14. Döbrököz–Tűzköves (SV cat. no. 49)



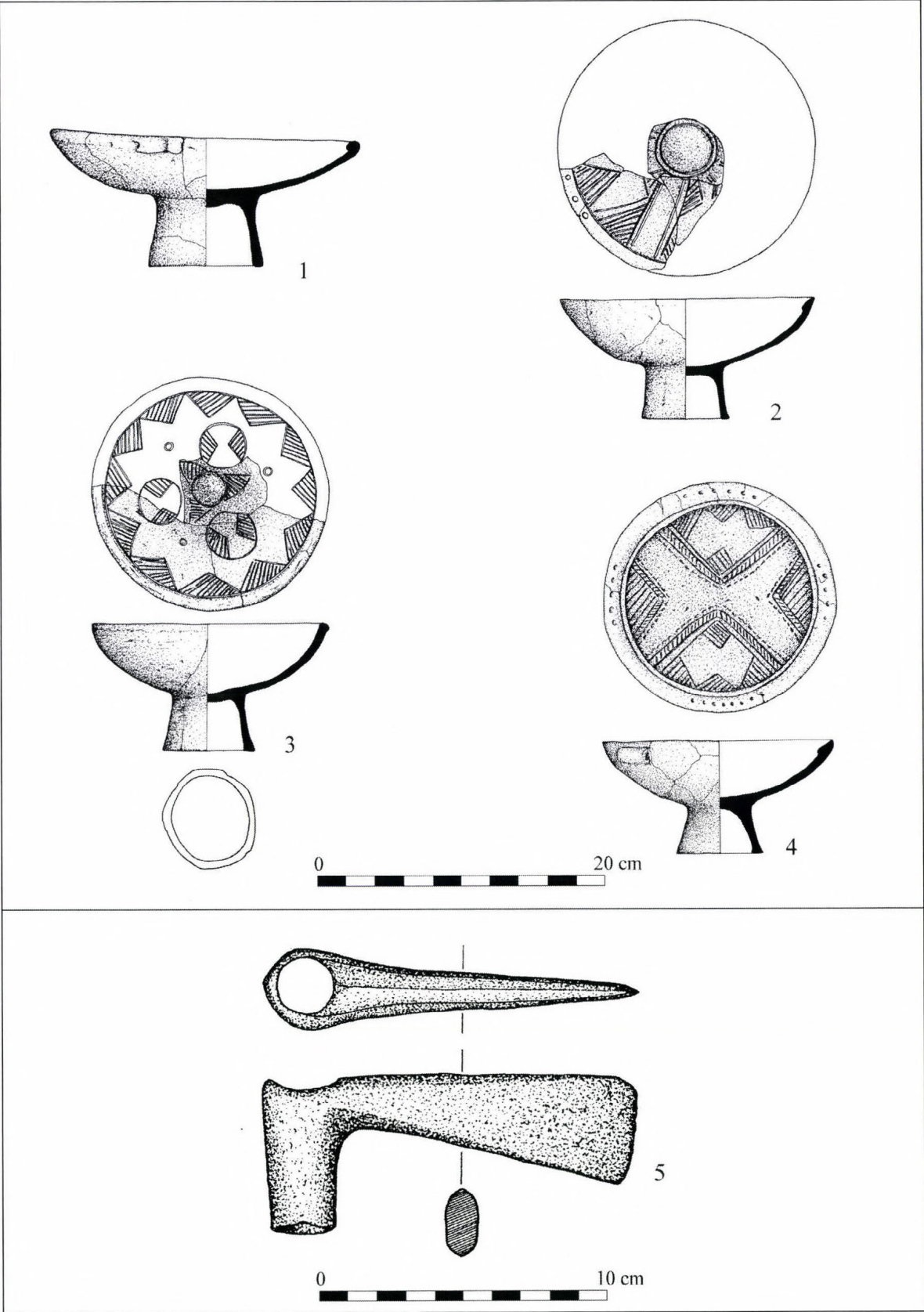


Pl. 45. Early Bronze Age finds from southern Transdanubia, County Tolna  
1–5. Gyulaj–Banyahegy (SV cat. no. 73)



Pl. 46. Early Bronze Age finds from southern Transdanubia, County Tolna  
1-12. Gyulaj-Banyahegy (SV cat. no. 73)



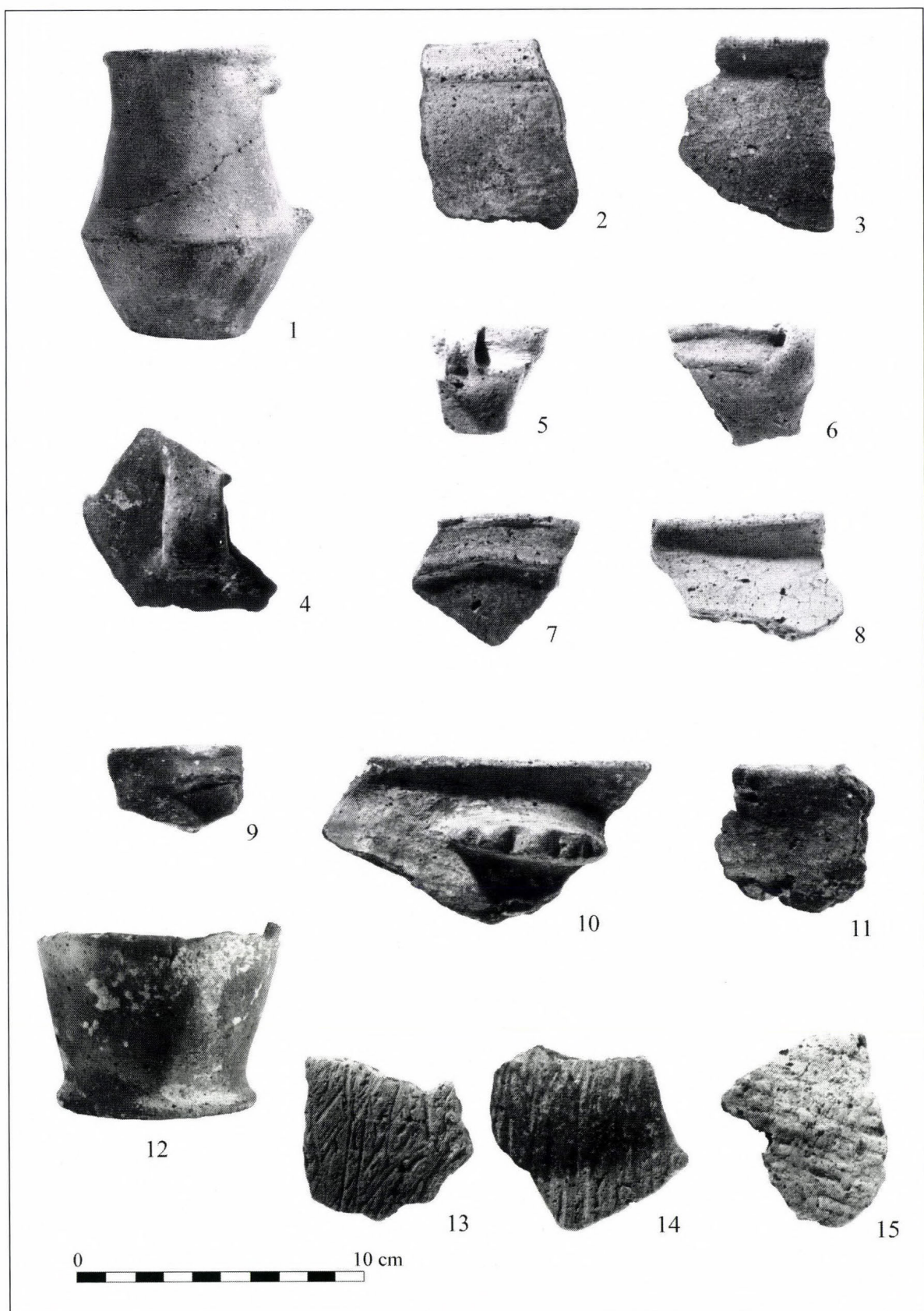


*Pl. 47. Early Bronze Age finds from southern Transdanubia, County Tolna  
1–5. Nagyvejke–Réti szántók-dűlő (SV cat. no. 149)*

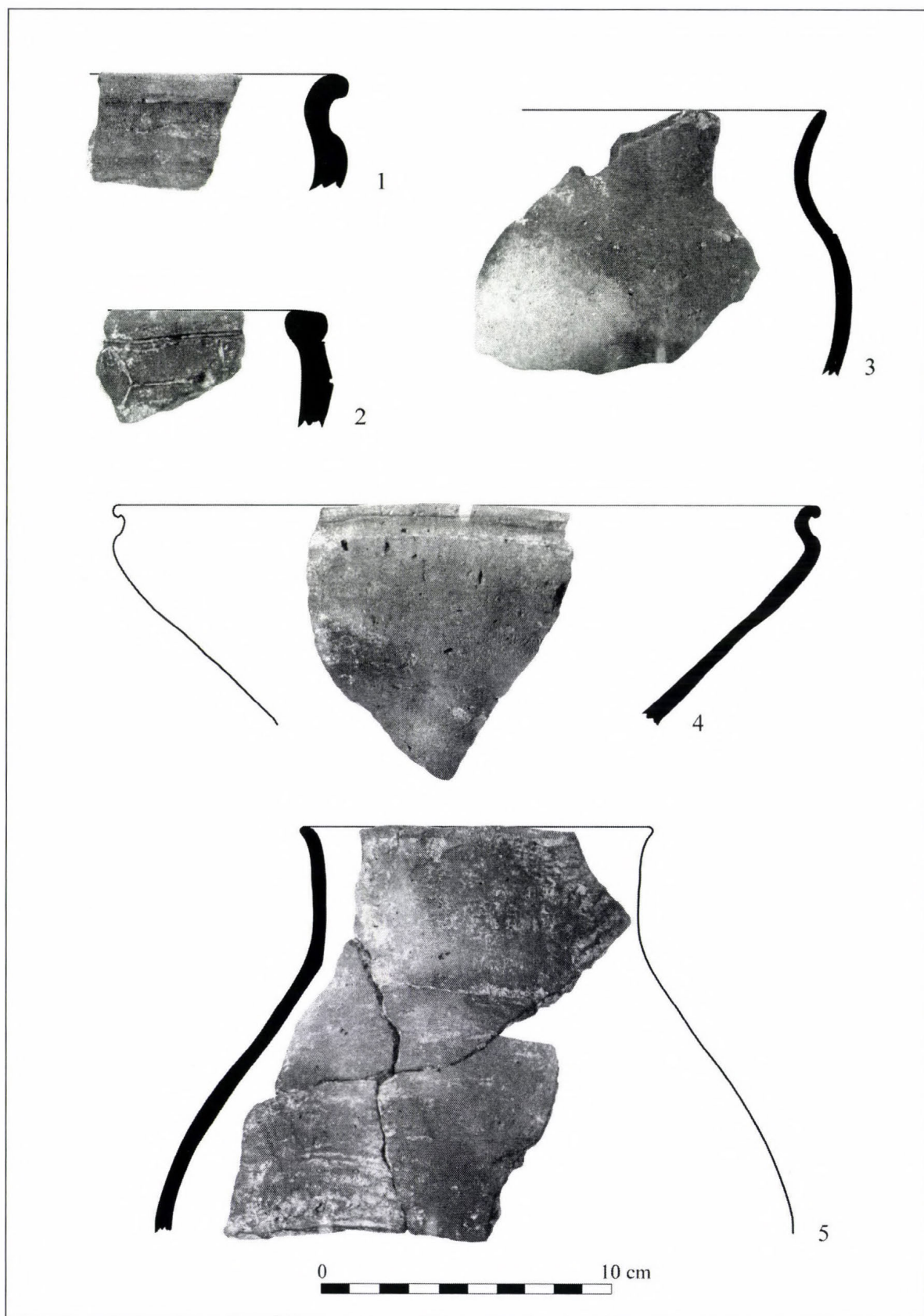


Pl. 48. Early Bronze Age finds from southern Transdanubia, County Tolna  
1–11. Nagyvejke–Réti szántók-dűlő (SV cat. no. 149)



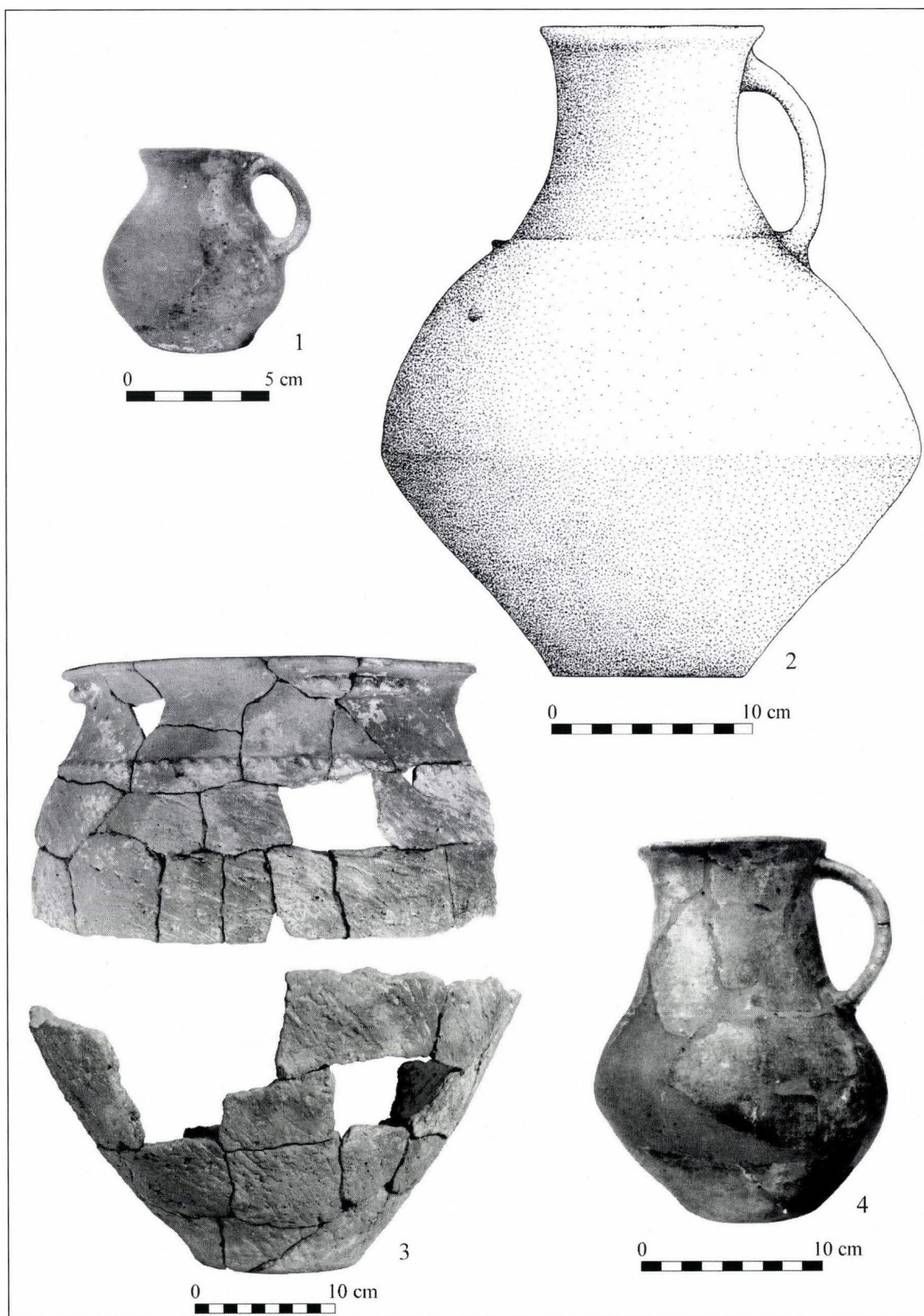


*Pl. 49.* Early Bronze Age finds from southern Transdanubia, County Tolna  
1–15. Simontornya–Sióhid



*Pl. 50.* Early Bronze Age finds from southern Transdanubia, County Tolna  
1–5. Tolna–Mözs, M9 Motorway, Site 10/B, Feature 695 (SV cat. no. 229)





*Pl. 51.* Early Bronze Age finds from southern Transdanubia, County Tolna  
Tolna–Mözs, M9 Motorway, Site 10/B, (SV cat. no. 229)

1. Feature 15, 2. Feature 390, 3. Feature 268, 4. Feature 264





Pl. 52. Early Bronze Age finds from southern Transdanubia, Counties Fejér and Tolna  
 1, 3, 4, 6. County Tolna (SV cat. no. 231), 2. Tamási (SV cat. no. 222),  
 5, 7. Regöly (SV cat. no. 178), 8. Baracs



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